

# **South Dakota GAME REPORT**

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***2003***

**Annual Report**

**DEER MANAGEMENT SURVEYS AND ANALYSIS**

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# 2003 Deer Management Surveys

## Annual Report

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## **ABSTRACT**

There were 15 South Dakota deer seasons in 2003: 1) West River Prairie, 2) Special West River Buck, 3) West River Landowner, 4) East River, 5) East River Special Buck, 6) East River Landowner, 7) Black Hills, 8) General Archery, 9) Antlerless Archery, 10) Sand Lake National Wildlife Refuge, 11) Lacreek National Wildlife Refuge, 12) Waubay National Wildlife Refuge - Firearm, 13) Youth Antlerless, 14) Muzzleloader Antlerless, and 15) Custer State Park (data not included). A summary of each season where data was collected is presented.

East River (43.5% of licenses sold, 51.9% of harvest), West River (22.6% of licenses sold, 27.2% of harvest), General Archery (12.9% of licenses sold, 5.1 % of harvest), and Black Hills Deer (6.4 of licenses sold, 5.0% of harvest) represented 85.5% of the 100,482 deer licenses sold and 89.3% of the record 69,954 deer harvested in South Dakota in 2003. The state harvest projection included 26,502 whitetail bucks, 31,520 whitetail does, 6,850 mule bucks and 5,082 mule does. Respondents reported hunting an overall average of 5.33 days per hunter for a projected statewide total of 535,338 recreation days in 2003.

The General Archery season lasted 102 days and hunters could purchase East River and West River licenses, or a statewide license. Archers could also apply for up to 5 lottery-drawn Special Antlerless licenses. Harvest success was 27% for the general season and 38% for the antlerless season. The two seasons combined to total 15.6% of the licenses sold and 6.7% of the deer harvest.

The Youth Deer season had 3,232 antlerless deer licenses sold from the 4,215 available and harvest success for the season was 55%. The special Muzzleloader Deer season had 3,366 of the 4,570 licenses sold and success for the season was 36%.

Many more 2-tag licenses were available in 2003 compared to 2002, factoring into a slight decrease in overall success, even though deer harvest was up nearly 12%. Harvest estimates increased from 62,591 in 2002 to 69,954 in 2003.

Samples of deer incisors were obtained from hunters for determining deer age classes represented in the 2003 harvest. A total of 27,681 (45% of projected harvest) envelopes were returned by hunters for the Black Hills, East River, West River prairie, and Youth deer seasons.

A total of 8,289 deer were classified during the fall of 2003 in order to estimate fawn recruitment. Recruitment appeared to be highest east of the Missouri River with 1.53 whitetail fawns observed per doe.

No work was performed on Deer Population Modeling in 2003.

## **PREFACE**

Data presented in this report were gathered during the 2003-2004 fiscal period under Pittman-Robertson Project W-95-R-37 for Study Number 9507 titled Deer Management Surveys. Jobs included are:

- Job 9507-1    Analysis of Deer Hunter Report Card Returns
- Job 9507-2    Deer Harvest Age Structure
- Job 9507-3    Mortality Rates of Fawn Age Class in South Dakota Deer Populations
- Job 9507-4    Deer Population Modeling

Previous reports of this study include annual study reports starting in 1973-74, and separate job reports prior to 1973-74. Unit by unit harvest projections for each respective season corresponding to this report are available in Huxoll, Corey, South Dakota Department of Game, Fish and Parks Report, Big Game Harvest Projections, 2003, Game Report No. 2004-01.

Data from this report may be referenced with permission from authorized personnel of the South Dakota Department of Game, Fish and Parks. Copies of the report are available from the Department of Game, Fish and Parks, Foss Building, Pierre, South Dakota, 57501.

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# ***2003 DEER MANAGEMENT SURVEYS***

## **INTRODUCTION**

When the early settlers came into South Dakota, deer were abundant. However, the discovery of gold soon brought an invasion of miners, settlers, market hunters, railroads, towns and the demise of a flourishing wildlife scene. Market hunting and killing for sport resulted in a deer population of near zero by 1889, when South Dakota became the 40th State. The Department of Game, Fish and Parks came into being on July 1, 1909. With the creation of the Department and stricter laws, deer numbers began to increase. Today, deer are common in every county of the state. No other big game species has adapted as well to living in close proximity to man than white-tailed deer.

In 2003 the annual harvest of deer in South Dakota increased to an all time high of 69,954, overcoming the previous record of 65,718 deer in 1994. Prior to 1947, the only deer season held in South Dakota was in the Black Hills. Since that time, the number of deer permits in the areas east of the Black Hills has increased dramatically in response to population increases.

Annual harvest regulations are the most commonly applied wildlife management tool used. Regulations can protect the future potential of stock and provide for optimal utilization and equitable distribution of benefits to the hunter. Through the proper application of these regulations, deer are found in all parts of the State. Adequate harvests and proper utilization of the resource can only be accomplished when the public is convinced that sufficient data are being collected to insure that these regulations are used on a scientific, predictable basis to assure that harvest will not jeopardize the population's future potential.

The ultimate objectives of deer management are to insure the health and dynamics of the population within the carrying capacity of the range and landowner tolerance levels, and to provide recreation to sportsmen. The hunting season is the most important tool in the manipulation of deer populations towards these ends.

## **STUDY OBJECTIVE**

The objective of this study was to obtain quantitative data regarding deer herd populations and hunter harvests.

## **JOB 9507-1 ANALYSIS OF DEER HUNTER REPORT CARD RETURNS**

### **Corey Huxoll, Harvest Surveys Coordinator**

#### OBJECTIVES

Job objectives were to determine deer hunter success, distribution of harvest by date, time, species, age, and sex ratios of deer harvested in each hunting unit. In addition, information is collected on most seasons to determine how many days hunters hunted and what the ultimate "satisfaction rating" a hunter placed on their overall experience.

#### PROCEDURES

Deer season harvests were assessed utilizing a sub-sampling harvest survey method. A random sample of hunters from all units was contacted by mail after the deer-hunting season. Two follow-up mailings were made in order to maximize response and minimize the effect of non-reporters on projected harvest statistics. A minimum acceptable unit response rate was arbitrarily established at 85%. This resulted in sample estimate statistics within +/- 15%. Projections were made solely from reported data utilizing simple relative mathematical expansions. No correction factors were employed.

Criteria for selecting sample sizes for conducting harvest surveys are as follows:

##### **Either Sex One Species**

Licenses <u>Available</u>	Sample <u>Size</u>
< 40	N
41-700	$57.663(\ln(N)) - 180.13$
> 700	0.25N

##### **Either Sex Two Species**

Licenses <u>Available</u>	Sample <u>Size</u>
<-75	N
76-650	$80.128(\ln(N)) - 275.96$
> 650	0.35N

##### **Buck or Doe Only**

Licenses <u>Available</u>	Sample <u>Size</u>
s 40	0.75N
41-300	$21.94(\ln(N)) - 50.054$
> 300	0.25N

##### **Two tag Two Sex One Species**

Licenses <u>Available</u>	Sample <u>Size</u>
!5 50	N
51-300	$22.651(\ln(N)) - 41.855$
> 300	0.30N

##### **Two tag Two Sex Two Species**

Licenses <u>Available</u>	Sample <u>Size</u>
<- 75	N
76-250	$35.702(\ln(N)) - 83.47$
> 250	0.45N



The 2003 deer season dates were as follows:

**General Archery:** Sept. 27 through Dec. 31, except for:

**Black Hills Unit:** Oct. 1 - Dec. 31,

**Sand Lake NWR:** Nov. 1 - Dec. 31 (closed during refuge firearm season)

Portions of **Lacreek NWR:** Sept. 27 - Dec. 31 (closed during refuge firearm season)

**Waubay Lake State Game Refuge** and **Waubay NWR:** closed during firearm season

**Fort Meade BLM south unit** and **signed portion of north unit:** closed during West river firearm season

**Antlerless Archery:** Sept. 27, 2003 through Jan. 31, 2004, except for:

**Sand Lake NWR:** Nov. 1 - Jan. 31, 2004 (closed during refuge firearm season)

Portions of **Lacreek NWR:** Sept. 27 - Dec. 31 (closed during refuge firearm season)

**Waubay Lake State Game Refuge** and **Waubay NWR:** (closed during refuge firearm season)

**Fort Meade BLM south unit** and **signed portion of north unit:** closed during West river firearm season

**Unit 727A (portions of Fall River and Custer Counties):** open Oct. 1 - Dec. 31

**Youth Antlerless Deer:** Sept. 13 - 21 & Dec. 6 - 31.

**Muzzleloader:** Dec. 13 - Jan. 31, 2004.

**West River, West River Special Buck, and West River Landowner Own Land Only:** Nov. 8-23, except:

**Units 341 B, 345E, and 350C:** Oct. 4-12

**Dewey and Ziebach Counties:** Nov. 1-23

**Unit 330A:** Nov. 1-4 and 17-23

In addition, all unsold and unused antlerless deer permits were valid Nov. 24-30 and Jan. 1-11 (private land only not leased for public hunting).

**East River, East River Special Buck, and East River Landowner Own Land Only, Northern and Western Units:** Nov. 15-30; Southeastern Units: Nov. 22-30.

In addition, all unsold and unused antlerless deer permits were valid Dec. 1-7 and Jan. 1-11.

**Sand Lake NWR:** Nov. 8-12 (muzzleloader only), Nov. 13-17, Nov. 18-23, Nov. 24-30, and Dec. 1-7

**Lacreek NWR:** Oct. 22-28, and Nov. 19-25 (both muzzleloader only)

**Waubay NWR (incl. Waubay State Game Refuge):** Nov. 7-11 (muzzleloader only), Nov. 12-16 (muzzleloader only), and Nov. 17-30.

**Black Hills:** Nov. 1 - 30 (type 52), Nov. 10 - 19 (types 01, 04, and 06)

Specific season areas can be found depicted in Figures 1 through 7 and a complete summary of South Dakota's 2003 license sales and deer harvest projections can be found in Table 1.

Historical deer season license sales and summarized season-specific, total harvest records can be found in Tables 2-17. Unit-specific harvest projections for all seasons, season summaries, season trend graphs, as well as other season- and unit-specific statistics are available elsewhere (Huxoll, Corey, South Dakota Department of Game, Fish and Parks Report, Big Game Harvest Projections. 2003 Game Report No. 2004-01).

### **STATEWIDE DEER HARVEST SUMMARY**

There were 88,866 resident deer licenses (plus unlimited licenses) available in 2003 and 94,847 were issued, an increase in sales of 5,239 from 2002. For nonresidents there were 2,861 licenses (plus unlimited licenses) and 5,635 were issued, an increase in sales of 942 from 2002. Statewide, there were a total of 100,482 licenses sold that represented 129,467 resident and 8,084 nonresident tags for a total of 137,551 tags, an increase in 15,483 tags from 2002.

Random samplings were taken for each season unless the number of licensees was low enough that all were sampled to satisfy the statistical analysis. In most cases, the majority of units within seasons met the 85% unit response rate goals. The East River Deer survey was an exception with an overall return rate of only 83.9%. The extended length and complexity of that season is assumed to be the reason for the poor response.

The projected statewide deer harvest was 69,954, the highest total ever recorded for South Dakota (Figure 8). This projection included 26,502 whitetail bucks, 31,520 whitetail does, 6,850 mule bucks and 5,082 mule does. Over 9,000 more tags were available and over 15,000 more were sold in 2003 compared with 2002. A combination of this increase and an estimated harvest success similar to 2002 appears to account for the increase in overall harvest of approximately 7,355 deer. Whitetail doe harvest increased by 6,425 and was primarily attributed to an increase of over 4,000 for the East River season. A decrease in harvest for the Black Hills season appears to be attributed to the second yearly reduction in the number of tags available and similar to 2002, a 4% decline in harvest success.

Harvest success varied by less than 4% throughout all seasons except West River Landowner and East River Landowner, which increased by 9% and 10%, respectively. After increasing from 52% in 2001 to 53% in 2002, overall statewide harvest success decreased to 51 % in 2003.

Respondents reported hunting an average of 5.33 days per hunter, which projects to a statewide total of 535,338 recreation days in 2003. The average number of days hunted increased by 0.11 per hunter, and coupled with increased license sales resulted in an increase of approximately 43,000 total days of recreation.

Hunter satisfaction values (1=very satisfied to 7=very dissatisfied) were very similar across all seasons and ranged from 2.42 for Lacreek National Wildlife Refuge to 2.95 for East River Landowner Only.

### **GENERAL ARCHERY DEER**

There were 12,995 general archery deer licenses issued in 2003 (11,628 resident, 1,367 nonresident). All were single any-deer tags for the statewide, East River and West River units.

A random sampling of 25% of licensees was taken (2,905 residents, 334 nonresidents) and the overall return rate for the survey was 85.4%. Approximately 28% of responding hunters used the internet response system.

The archery season ran from September 27 through December 31 except in the Black Hills where the season did not open until October 1. Over 52% of the reported harvest occurred during the month of October (Figure 8). Respondents reported hunting 11.87 days per hunter, which projected to a total of 154,251 recreation days for the season. Of those who responded, 5.6% reported they did not hunt at all.

The projected deer harvest for the general archery season was 3,540 deer (2,352 adult whitetail bucks, 625 adult whitetail does, 118 juvenile whitetail bucks, 80 juvenile whitetail does, 266 adult mule bucks, 80 adult mule does, 14 juvenile mule bucks, and 5 juvenile mule does). The projected success rate for the season was 27%.

Satisfaction was also measured (1=very satisfied to 7=very dissatisfied) and the average response rate for this season was 2.57.

Hunters were also asked to identify if they harvested a deer in the Black Hills, Sand Lake National Wildlife Refuge, or Farm or LaFramboise Islands. Estimates indicated 273 deer were harvested in the Black Hills (170 in 401A, 74 in 402A, 14 in 403A, 15 in 404A), 9 at Sand Lake National Wildlife Refuge, and 29 on Farm and LaFramboise Islands.

#### **ANTLERLESS ARCHERY DEER**

There were 2,715 licenses sold (2,642 resident, 73 nonresident) that represented a total of 3,062 tags of the 4,890 that were available for the 2003 season. Random sub-samples totaling 2,614 licensees were taken (96% sampled overall) and 2,289 responses were received (87.6% response rate). Approximately 32% of responding hunters used the Internet to do so.

The season ran from September 27, 2003 through January 31, 2004, a total of 127 days. Those responding reported hunting an average of 11.8 days per hunter, which projected to 32,037 recreation days for the season. There were 5.2% who reported they did not hunt at all.

The projected harvest for the Antlerless Archery season was 1,152 deer (87 whitetail bucks, 1,021 whitetail does, 7 mule deer bucks, 37 mule deer does) for a success rate of 38%.

The overall satisfaction for the Antlerless Archery season was 2.43, on a scale with 1 being "very satisfied" and 7 being "very dissatisfied".

Harvest projections based on hunter reports indicated the harvest of 6 deer at Sand Lake, 0 at Pocassee National Wildlife Refuge, 3 at Little Bend, 0 at Lacreek National Wildlife Refuge, and 7 at Waubay National Wildlife/State Game Refuge.

#### **YOUTH ANTLERLESS DEER**

There were 3,256 single tag antlerless licenses issued for the 2003 Youth Deer hunting season (Figure 10; 3,173 resident, 83 nonresident). Licenses remaining after the second resident drawing became available to nonresidents. Approximately 97% of license holders were sampled and 2,720 responses (86.2%) were received. Approximately 26% of responding hunters used the internet to do so.

The Youth season ran from September 13-21 and reopened from December 6-31, a total of 35 days. Respondents reported hunting an average of 4.05 days each, which projected to 13,187 recreation days for the season. Of those responding to the survey, 6.9% said they did not hunt. License holders were asked if they hunted in September, December or both. Of those responding, 35.0% indicated they hunted in September only, 39.5% in December only, and 25.6% hunted during both months.

Projections for the season estimated that a total of 264 whitetail bucks, 1,234 whitetail does, 30 mule deer bucks, and 243 mule deer does were harvested. The total deer harvest for the Youth Deer season was 1,771, and the overall success rate was 56%.

The overall satisfaction rating for those responding (1 being very satisfied and 7 very dissatisfied) was 2.52.

#### **MUZZLELOADER DEER**

There were 3,366 antlerless deer licenses (3,307 resident, 59 nonresident) issued for the 2003 Muzzleloader Deer season that represented a total of 3,992 tags (Figure 11; 3,903 resident, 89

nonresident). The number of licenses sold increased but the percentage of hunters who purchased more than one license decreased from 2002(Figure 12). A sample of 3,241 licensees (96%) was taken for the harvest survey and the overall response rate was 88.6%. Approximately 28.8% of responding hunters used the Internet response system.

The Muzzleloader season was open from December 13, 2003 through January 31, 2004, a total of 51 days. Hunters for this season averaged hunting 5.18 days, for a projected total of 17,436 recreation days for the entire season. Of those reporting, 12.1 % said they did not hunt at all.

The estimated harvest for the Muzzleloader season was 1,430 deer (184 whitetail bucks, 974 whitetail does, 23 mule deer bucks, and 249 mule deer does). Even with the extended East River and West River regular firearm seasons being extended into January, the overall success rate for the muzzleloader season increased slightly to 36% and overall average satisfaction declined only slightly to 2.75 (1 = very satisfied, 7 = very dissatisfied). Approximately 37% of the reported deer harvest took place in December and 63% in January.

### **WEST RIVER DEER**

There were 22,754 licenses issued for the 2003 West River Firearm Deer season (Figure 13; 20,449 residents, 2,305 nonresidents). A total of 38,193 tags were issued (34,226 residents, 3,967 nonresidents). In addition, there were 800 West River Special Buck single-tag licenses issued (400 residents, 400 nonresidents), and 752 Landowner Own Land Only licenses (944 tags). A total of 324 special October season licenses were available for the second year and 175 were sold. These licenses were valid during the Firearm Antelope season (October 4-12) and were available only in Jones, Lyman, and Mellette counties.

Application pressure was highest for type 01 (any deer) licenses, with 8,024<sup>1st</sup> choice applications for 5,080 licenses (Table 18). The next highest were types 07 (any mule deer) and 41 (any mule deer plus any antlerless mule deer). On the other hand, only 45.3% of type 17 (antlerless whitetail plus antlerless whitetail) and 47.2% of type 42 (antlerless mule deer plus antlerless mule deer) licenses were sold.

Beginning November 24<sup>th</sup>, all unused and unsold tags for "any deer", "any whitetail" and "any mule deer" were changed to their respective antlerless tags. The season was extended from Nov. 24-30 for all unfilled and unsold antlerless deer tags, and again on private land only from Jan. 1-11. In addition, the maximum number of licenses an individual could purchase was increased from 3 to 5 and license fees were reduced for single and double-tag antlerless licenses for both residents and nonresidents.

A random sample of 12,010 hunters was taken from the regular West River season (10,794 residents, 1,216 nonresidents), 798 from the Special Buck season (all were sampled, 2 were undeliverable), and 750 hunters from the Landowner Own Land Only licensees (2 were undeliverable). The overall response rates for the seasons were 85.2% for the regular West River Deer, 89.6% for Special Buck, 77.2% for Landowner Own Land Only, and 83.3% for early October Antlerless. Of all responding hunters, 25.2% of regular West River, 14.2% of landowner only, and 25.0% of Special Buck hunters responded over the internet.

The West River season was open 16 days from November 8-23 in most units, and from November 1-23 in Dewey and Ziebach counties. Unit 350A in Mellette County was open from Nov. 1-4 and 17-23, while Unit 350B was open from Nov. 8-23 and Unit 350C was open from Oct. 4-12. Respondents reported hunting an average of 3.49 days in the regular West River season, 3.50 days in the Special Buck, and 4.02 by the Landowner Own Land Only licensees. These averages projected to a total of 85,235 recreation days for all West River deer seasons (78,801 regular West River, 2,800 Special Buck, 3,023 Landowner Own Land Only, 611 Early October Antlerless). Of those reporting, 4.6% of the regular West River season, 5.0% of the Special Buck season, and 5.5% of the Landowner Own Land Only licensees said they did not hunt.

The West River projected deer harvest was 18,825 for the regular season, 579 for the Special Buck season, 448 for the Landowner Own Land Only licenses, and 199 for the early October Antlerless season. Success rates were 50% for the regular season, 69% for the Special Buck, 64% for the Landowner Own Land Only, and 48% for the early October Antlerless season. Success for the regular and October West River season single tags and <sup>1st</sup> tags was 61% (13,857 deer harvested), 2" <sup>d</sup> tags of 2-tag licenses was 33% (5,167 deer harvested). The estimated regular season deer harvest included 5,278 whitetail bucks, 5,141 whitetail does, 4,717 mule deer bucks, and 3,888 mule deer does (Figure 14).

Harvest success rates were virtually the same as in 2002; however, a shift in availability from single any-tags to double any plus antlerless tags contributed to an increase in overall deer harvest of 1,783 and an increase in the doe harvest of 2,724 (Table 19).

Approximately 7% of survey recipients indicated that they harvested their deer during the January extension (Table 20). Approximately 20% of the doe harvest and 57% of the harvest indicated by hunters with antlerless-only licenses occurred during the November and January season extensions (Tables 21 and 22).

The mean satisfaction score for those responding to the regular and October West River seasons was 2.83 (1 being very satisfied and 7 very dissatisfied).

Hunters were asked if they harvested a deer on public land, private land, or walk-in areas. Of those responding, 75.8% harvested deer on private land, 16.1 % on public land, and 8.0% on walk-in areas.

### **EAST RIVER DEER**

There were 43,709 licenses issued for the 2003 East River Firearm Deer season (42,872 residents and 837 nonresidents) that represented 63,660 total tags (Figure 15; 62,079 residents and 1,581 nonresidents). In addition, there were 399 East River Special Buck licenses issued to residents and 2,575 Landowner Own Land Only licenses (3,089 tags). Approximately 2,732 more licenses were issued for the regular season than in 2002, and an increase in the proportion of double-tag to single-tag licenses contributed to a sales increase of 8,425 tags.

Application pressure was highest for type 01 (any deer) licenses, with 25,106 <sup>1st</sup> choice applications for 13,685 licenses and type 04 (any whitetail) licenses with 3,613 <sup>1st</sup> choice app's for 1,900 licenses (Table 23). The only other license type that had more <sup>1st</sup> choice app's than available licenses was type 12 (any deer plus antlerless deer) with 7,143 <sup>1st</sup> choice app's for 6,100 licenses. All other license types eventually sold out except 09 (any antlerless mule deer), 13 (any antlerless deer plus any antlerless deer), 16 (any whitetail plus antlerless whitetail) and 17 (antlerless whitetail plus antlerless whitetail).

A random sampling of 21,139 hunters was taken for the regular season (48.4% of license holders), all 399 Special Buck hunters, and 2,497 Landowner Own Land Only (97.0%). The response rate was 83.9% for the regular season, 95.0% for Special Buck, and 82.3% for Landowner Own Land Only.

The East River season ran November 15 to November 30 (16 days) in the north and west units. In the southeastern units the season ran November 22 to November 30 (9 days) for type 01, 02, 04, 07, 10, 12, 16, and 41 licenses, and from November 22 to December 7 (16 days) for type 03, 06, 13, and 17 antlerless-only licenses. Beginning December 1, all unused and unsold tags for "any deer" (01), "any whitetail" (04) and "any mule deer" (07) were converted to their respective antlerless tags. The season was extended from Dec. 1-7 for all unfilled and unsold antlerless deer tags, and again from Jan. 1-11. In addition, the maximum number of licenses an individual could purchase was increased from 3 to 5 and license fees were reduced for single and double-tag antlerless licenses for both residents and nonresidents. Respondents reported hunting 4.4 days per hunter during the regular season, 5.0 days during the Special Buck season, and 4.4 days during the Landowner Own Land Only season. The projected total of recreation days was 170,601 for all East River seasons (192,320 regular season, 2,000

Special Buck, 11,381 Landowner Own Land Only). Of those responding, 2.1 % of the regular season, 1.6% Special Buck, and 1.6% Landowner Own Land Only hunters reported that they did not hunt at all.

The projected harvest for the regular East River Deer season was 36,341 (13,984 whitetail bucks, 21,473 whitetail does, 418 mule deer bucks, and 466 mule deer does), 226 for the Special Buck season (213 whitetail bucks and 13 mule deer bucks), and 1,559 from the Landowner Own Land Only hunters (1,054 whitetail bucks, 438 whitetail does, 57 mule deer bucks, and 10 mule deer does). Success rates were 57% for the regular season, 56.6% for Special Buck, and 50.5% for Landowner Own Land Only hunters. Success for the regular East River season single tags and 1<sup>st</sup> tags was 66% (28,712 deer harvested), and success for 2<sup>nd</sup> tags of 2-tag licenses was 38% (7,629 deer harvested). Regular season whitetail doe harvest increased approximately 24% and total deer harvest increased approximately 12% from 2002. Overall doe harvest increased by 4,251 deer from 2002, accounting for an increase of 3,895 deer overall (Table 24). Whitetail doe harvest has increased by nearly 100% since 1999 (Figure 16).

Of hunters who had type 01 (single tag any-deer) licenses, 38.6% were unsuccessful at harvesting a deer, 49.1 % harvested a buck, and 12.3% harvested a doe. Approximately 80% of the type 01 harvest consisted of bucks.

Approximately 11 % of survey recipients indicated that they harvested their deer during the January extension (Table 25). Approximately 25% of the doe harvest and 33% of the harvest indicated by hunters with antlerless-only licenses occurred during the December and January season extensions (Tables 26 and 27). Approximately 21 % of the reported antlerless deer harvest in Region 3 and 16% of the reported antlerless deer harvest in Regions 2 and 4 occurred during January for a total estimated January harvest of 3,877 antlerless deer (Figures 17 and 18).

The mean satisfaction score for those responding to the regular East River survey was 2.86 (1 = "very satisfied" and 7 = "very dissatisfied"). Mean satisfaction for Landowner Own Land Only hunters was 2.95.

Regular season hunters were asked if they harvested their deer on public land, private land or on public walk-in areas. Of those responding, 85.4% reported harvesting deer on private land, 10.7% on public land and 3.9% on walk-in areas.

### **NATIONAL WILDLIFE REFUGE DEER**

The number of licenses issued for the 2003 Sand Lake Refuge Deer season was 594 (540 residents and 54 nonresidents); Lacreek Refuge was 44 (40 residents and 4 nonresidents); and Waubay Refuge was 71 (67 residents and 4 nonresidents). All were single-tag licenses.

All license-holders for each season were surveyed and response rates for Sand Lake, Lacreek, and Waubay refuges were 88.6%, 97.7%, and 97.2%, respectively. Approximately 31.0% of responding hunters used the internet response system.

The seasons had different opening dates in the each refuge. All ran between 5 and 7 days except Unit 603C, which was open 14 days. The average days hunted for Sand Lake was 2.72, for Lacreek was 2.42, and for Waubay was 2.45. Of the refuge license-holders that responded to the survey, 8.2%, 11.6%, and 11.6% did not hunt at Sand Lake, Lacreek, and Waubay refuges, respectively. There were a projected 1,544 recreation days at Sand Lake, 106 at Lacreek, 124 at Waubay, for a total of 1,678 days at the three refuges combined.

The reported harvest at the refuges consisted primarily of white-tailed deer. Two mule deer were harvested at Sand Lake Refuge. The projected harvest for Sand Lake was 169 bucks and 50 does, for Lacreek was 10 bucks and 5 does, and for Waubay was 31 bucks and 13 does. The projected success rate for Sand Lake was 37%, for Lacreek 34%, and for Waubay 62%.

### **BLACK HILLS DEER**

There were 6,438 single tag licenses issued for the 2003 Black Hills Deer season (5,965 resident, 473 nonresident).

A random sample of 2,186 hunters was taken (34% of license holders) and there were 1,966 responses for a 89.7% return rate. Approximately 21.7% of responding hunters used the internet to submit their responses.

The traditional Black Hills Buck season ran the usual month of November, a total of 30 days. The special any-deer and antlerless whitetail seasons ran from November 10-19, a total of 10 days. Those responding reported hunting an average of 4.01 days (5.05 days each for those participating in the buck only portion of the season). That projected to 25,816 recreation days for this season. Of those responding, 8.5% stated they did not hunt at all during the season.

The mean satisfaction score for all combined units was 2.58. The satisfaction scale ranged from 1 = "most satisfied" to 7 = "least satisfied".

The harvest projection for the Black Hills Deer season was 3,576 deer (2,427 whitetail bucks, 402 whitetail does, 694 mule deer bucks, 53 mule deer does). The overall season harvest success rate was 56%.

## ***JOB 9507-2 DEER HARVEST AGE STRUCTURE***

### ***Ted A. Benzon: Statewide Big Game Biologist***

#### **OBJECTIVES**

The objective of this job is to provide management personnel with harvest age structure data for specific deer hunting units.

#### **PROCEDURES**

In 2003, only successful applicants for the Black Hills, East River prairie, West River prairie, and youth deer seasons were required to submit incisors from harvested animals.

Not all hunter-submitted envelopes were usable. In some cases, canceling machines at the Post Offices ripped incisors from the envelopes while other envelopes were empty as hunters had neglected to enclose the incisors. Other envelopes contained incisors with absent root tips while others contained useful incisors but insufficient data were recorded (no unit of kill, no sex of deer killed, or no information at all).

Species classification was determined from incisor structure. Incisor structure and wear were then examined to determine if the deer was a fawn, yearling, or adult. Special care had to be taken in this classification step as some fawns had replaced deciduous incisors completely with permanent incisors. These permanent incisors were hollow, however, and identification was not difficult. Hunting unit, species, sex and age class was then entered into a database used for season recommendations.

The Harding county west river deer season unit was the only hunting unit that had the sectioning process completed. This unit experienced a large EHD die-off, and managers wanted to determine the effects on age class within the herd. Dental cementum annule ageing technique and process was used as described in the procedure manual by the Wyoming Game and Fish histology laboratory.

#### **FINDINGS**

Over 26,400 deer incisors (45% of projected harvest) were received and processed. Calculated age structures and interpretation of those data were presented to Operations personnel and recommendations made for the 2004 hunting seasons.

#### **RECOMMENDATIONS**

Continue sampling hunter killed deer through incisor submission.



**JOB 9507-3: MORTALITY RATES OF FAWN AGE CLASS  
IN SOUTH DAKOTA DEER POPULATIONS  
Ted A. Benzon: Statewide Big Game Biologist**

**OBJECTIVES**

The objectives of this job is to annually determine fall fawn recruitment rates of the Black Hills, West and East River deer populations.

**PROCEDURES**

Wildlife Conservation Officers and other personnel will conduct random surveys of each deer management unit within the state. Surveys will be conducted preferably in September but may be also been done in October. A minimum of 30 individual observations per species per unit is needed to ensure sufficient sample size. Data collected will include date, time, species, doe and fawn numbers, county, and management unit. Sufficient sample size and avoidance of duplication of counts will be necessary to insure accurate counts.

Survey results will be compiled to obtain fawn/doe ratios for each management unit. Data will be used to determine recruitment rate into population each fall and compared to harvest data as determined in Job II of this study. Statistical analysis of mean fawn/doe ratios and standard errors will also be compared to past year's surveys to determine trend. In addition, data from this Job in conjunction with data from Job II will be used in Job IV of this study to model specific management units within the state.

Sampling units - Black Hills management units sampled are reflected in the hunting units depicted in Appendix Figure 1.

West River Prairie was divided into Region I and Region 2 for separate reporting classifications and then combined for an overall picture of trend data.

The East River management area was divided into Region 2, Region 3, and Region 4 for reporting classifications and then combined for overall trend data.

**FINDINGS**

A total of 8,289 deer were classified during the fall of 2003 (Tables 28, 29, 30). Data collected was used to compare trend data from previous years and to determine fall recruitment into the present year's population for comparison with harvest data.

**RECOMMENDATIONS**

Continue collecting fall doe/fawn ratios for use in season recommendations.

***JOB 9507-4: DEER POPULATION MODELING***  
***Ted A. Benzon: Statewide Big Game Biologist***

**OBJECTIVES**

To formulate management unit population models for South Dakota deer populations.

**PROCEDURES**

Population modeling computer software can be used to simulate deer herd response to a variety of harvest schemes and population dynamics. Input data will in part be based on Jobs I, II and III of this study. Hunter Harvest Survey (Job I) will be used to determine species and sex of hunter killed deer. As hunter harvest makes up the majority of annual deer mortality, these data will be vital to modeling outcomes. Job II (Deer Age Structure Survey) will be used for determining age structure of the harvest. Job III (Recruitment Rates of Deer Fawn Age Class) will yield data on annual recruitment into the population. Relationships of data between and within all three jobs will be used to formulate trend information and estimation of population survival.

Modeling will be used to simulate population numbers and trends. Results of modeling will be used in conjunction with harvest data to formulate hunting season recommendations. As new data on population dynamics becomes available through research, data will be used to adjust input variables to refine model output.

**Discussion**

No work has been conducted.

# STUDY SUMMARY AND CONCLUSIONS

## Field Evaluations of Deer Seasons - Subjective Narratives

### **TED A. BENZON: STATEWIDE BIG GAME BIOLOGIST**

#### **East River management area**

The winter of 2002-2003 was again mild, which would allow for an increase in population numbers. Preseason Fall Classifications indicated good recruitment averaging 153 fawns per 100 does. With another increase in tag numbers, extended season, and tag conversion we did get the needed increase in harvest. This year, 54% of the doe harvest was fawns and yearlings, which should hopefully suggest that the deer population was kept in check. An increase in antlerless tags for next years hunting season would still be warranted in order to bring the population down to desired numbers. As in the past, there were leftover antlerless tags for the 2003 season, but with the large increase in available tags, more deer were harvested than the previous year. We are now approaching harvesting twice as many does as bucks, which is the segment of the population we need to reduce. With a decrease in any deer tags in future years, we may be able to hopefully encourage hunters to acquire an antlerless tag for the opportunity to hunt.

#### **West River management area**

During 2003, deer numbers continued to increase. Past winters have been mild in most of the management units. As in 2002, not all the antlerless tags were sold in 2003. Average percent harvest of yearling and fawn does did increase to 47% in 2003, which could indicate that we are starting to get into the recruitment. Preseason fall classification was not as high as East River with an average of 121 fawns per 100 does. Some units West River did experience EHD die-offs, which lowered the population with the combined effects of the hunting season. These units may now have the population goals that are needed, but other units still need to have the deer numbers reduced. Harvest again on the any deer tag type was 88% buck harvest. As with the east river management unit, fewer any deer tags with an increase in the any deer plus antlerless deer tags will be needed to control the increasing deer numbers.

#### **Black Hills management area**

The Black Hills deer herd again demonstrated an increase in population numbers. Whitetail fawns per doe ratios slightly decreased from 96 fawns per 100 does in 2002 to 84 fawns per 100 does in 2003 but was still higher than historic rates which should allow for the desired further increase in population numbers in the central and southern hills. The northern portion of the hills again had some slight depredation problems indicating the need for population control for that area. Although it is desired to increase population numbers in the central and southern hills, it should be a controlled increase keeping the buck to doe ratio in mind. This year the any whitetail tags were eliminated and replaced with antlerless tags in an attempt to slow the growth. In order to keep the growth in population numbers in a controlled manner, and keep the buck to doe ratios at a proper level an increase in antlerless tags will be recommended for the 2004 hunting season. Recruitment for the mule deer herd was again low with only 67 fawns per 100 does. It appears that no matter what we do to protect the mule deer herd in an attempt to increase population numbers, it remains at low.

JOHN WREDE: REGIONAL WILDLIFE MANAGER, REGION I

**PRAIRIE DEER**

**Population**

Trends in the western South Dakota prairie deer population appear to be mostly stable for both mule deer and white-tailed deer in spite of increasingly severe drought conditions that continue to persist. Hunting license numbers were increased in several management units for the 2003 season in an effort to further slow the growth of populations of both species in those units and attempt to obtain a larger number of specimen samples for CWD testing from selected management units. An anticipated higher mortality rate in white-tailed deer from EHD materialized in several management units. Hot and dry conditions throughout the summer and fall of 2003 prompted moderate die offs in Harding, Perkins, Bennett counties and isolated small die offs in other management units. There remains a growing concern about the maintenance and/or improvement of deer populations on public lands in western South Dakota.

Increasing hunting pressure on public lands is occurring in response to the rapidly evolving fee hunting and private land guiding operations that proliferate on thousands of acres of private land. There appears to be general acceptance of the suggestion that harvest mortality is contributing to lower deer numbers on most public lands. That suggestion coupled with habitat quantity/quality issues on public lands further compounds the deer distribution disparity. CWD is also a concern in several management units although there appears to be no clear indication that the documented presence of the disease is a limiting factor to populations. Mild winters in 2001, 2002 and 2003 have likely contributed to increases in fawn recruitment thereby offsetting whatever population reductions may have occurred. Fall classification counts suggested slightly better than average recruitment at 1.13 fawns/100 white-tailed does and 0.89 fawns/100 mule deer does; a slight increase in whitetail reproduction from 2002 and a moderate reduction in mule deer from 2002.

**Harvest**

Generalized field evaluations of the 2003 deer harvest indicate that hunter success was good to excellent in most management units. A small decrease in hunter success is attributable to increased numbers of licenses and tags. While harvest success remained the same (50% in 2003 as compared to 50% in 2002), more deer were taken by hunters than during the 2002 hunting season. The consistency of harvest percentage seems to indicate adequate access and deer numbers in spite of increases in hunter numbers and tags. The hunt remains largely a pursuit of antlered deer. Harvest data however, strongly indicates that the margin of harvest between does and bucks is shrinking. License types and season design were more heavily slanted toward antlerless harvest. Hunter satisfaction remains high at over 65% approval. Recent surveys conducted indicate hunters would be willing to harvest more antlerless deer if it can be shown that increased antlerless harvest was vital to the proper management of the deer herds and/or it was needed to control disease. Hunters indicate that they are hesitant to take more deer because they already have enough venison for their needs; given that the vast majority of West River deer hunters have multiple deer licenses for seasons other than the western South Dakota prairie. There is little question that commercialization of hunting opportunity affects antlerless harvest and overall harvest opportunity for the average hunter. Harvest in three or four management units may also have been more impacted by hunter concerns about Chronic Wasting Disease.

Similar to 2002, the 2003 hunting season was, for the most part, dominated by mild, warm weather but there were fewer complaints from hunters that weather influenced their harvest success. Deer were fairly well distributed, mostly on private land throughout the fall and remained that way throughout the majority of the winter.

**Depredation**

Depredation complaints have remained relatively consistent and relatively small in number since the winter of 2000/2001. The majority of the complaints occurred prior to the opening of the West River Deer Season when the first heavier snow and cold weather invaded parts of the Prairie region. The remainder

of the complaints arose in late winter just prior to spring green up. Some management units experienced a small increase in complaints while other areas logged no complaints at all. Most of the depredation issues are focused in three or four management units where hunting access has been problematic in the past largely due to commercialization or proximity to population centers where hunting activities can present public safety concerns. Mild winter weather certainly moderated depredation issues in most areas. Drought conditions tended to encourage additional deer movements to areas of improved winter resources, which in turn resulted in the highly localized depredation concerns. Only one depredation hunt, and two kill permits were utilized during the winter of 2003/2004 to address depredation issues that could not be satisfied in any other way. Less than 20 animals were taken in those efforts. White-tailed deer were most responsible for the depredation problems. Some commercial hunting enterprises are reported to be attracting deer onto leased properties prior to the hunting season to better serve a limited number of paying clients and suspending the attractants after the hunting seasons are over. These conditions tend to make it more difficult to manage the deer and the depredation problems that occur on neighboring lands in those areas

### **Outlook**

Another very mild winter, coupled with much improved antlerless harvest and declining range conditions are expected to moderate herd growth in most management units in 2004. Emphasis in 2004 will once again be concentrated on herd stability in some units and reduction in others. It is assured that total license and tag numbers will exceed the 25 year average for the third year in a row to accomplish the aforementioned. CWD remains a concern and efforts will continue to expand surveillance, both in area and sample sizes, in an effort to secure a better understanding of the disease's distribution and prevalence.

## **BLACK HILLS DEER**

### **Population**

The Black Hills deer herd experienced another year of modest growth but remains a mere shadow of historical high population numbers. There appears to have been modest improvement in fawn recruitment in the whitetail species that is likely attributable to small improvements in habitat conditions coupled with three mild winters in a row. Substantial improvements have been made in recruitment of older age class bucks into the herd as well and there is some suggestion that this condition has contributed to a more consistent and stable parturition period in spring. Habitat quality and quantity in addition to inter-specific competition with elk are concerns. Three large forest fires occurred in the Black Hills during the summer of 2002. The fires appeared to have little to no affect on wintering deer and will definitely provide much improved habitat in the years ahead. It is still commonly held that there is room for expansion of the Black Hills deer herd in spite of the habitat variables, urban encroachment and continued heavy grazing in the Black Hills National Forest. Growth should focus primarily in the central and southern Black Hills. As near as can be determined, species composition remains at 70% white-tailed deer and 30% mule deer in the Black Hills. Deer appear to be near evenly dispersed throughout the Black Hills in summer and tend to concentrate into traditional wintering areas in the east-central and eastern/western foothills of the Black Hills beginning in September through April and May. It has been noted that more deer are beginning to winter in some of the higher elevations of the central Black Hills but it is unknown if these occurrences are functions of mild winters, habitat availability/density responses or home range behavioral characteristics. All things considered, populations have responded positively to management and herd numbers are anticipated to rise again in 2004 barring catastrophic climatic events.

### **Harvest**

Black Hills Deer hunter success rose above the historical high of 55% set in 2001. Any Deer licenses were reduced slightly from the 2002 hunting season but the Buck Only licenses remained the same in number. Antlerless whitetail licenses were substituted for the Any Whitetail deer licenses during the special, mid-November hunt. Hunter success with the Any Deer license was higher in most units than the

buck only license utilized throughout the Black Hills. Hunter success for the Antlerless Whitetail license was also higher than buck only success except in one management unit. The Any Whitetail deer license was replaced with the Antlerless whitetail deer license because harvest on the former license type had become nearly a buck only harvest and increased antlerless harvest was needed to begin trimming herd densities and improving buck/doe ratios. The increase in over all hunter success can not be easily explained but it is likely that hunting conditions, increasing herd densities and access to deer contributed to the improved harvest. For the most part, the month of November was unusually mild, with limited snow cover. Deer remained dispersed and but dryer hunting conditions made it more difficult for hunters to locate and approach deer. Fewer complaints about the hunting conditions were received in 2003 than 2002 even though climatic conditions during the month of November were similar. While the climatic conditions may not have been ideal for deer hunting in the Black Hills, they did accommodate better access to all areas of the Black Hills but did not appreciably reduce the amount of road hunting that has become more popular in recent years. Hunter satisfaction with the season continued to increase, albeit gradually. Hunter comments regarding the observation of a greater number of branch antlered deer during their hunts tends to be born out in the age class distribution data that shows an average of nearly 60% of all bucks taken with available license types were 2 ½ years of age or older. Hunters particularly like the uncrowded conditions of the hunt and the opportunity for unencumbered movement that are possible on vast expanses of public land.

### **Depredation**

Depredation concerns markedly diminished, presumably stimulated by the mild winter weather of 2003/2004. Wildlife Conservation Officers and Wildlife Damage Management personnel responded to less than two dozen complaints during the winter months. Many of the problems can not be reasonably satisfied. Many occur in urban and suburban areas and involve ornamental shrubs, trees, feed for horses, etc and occasional fence issues, and many are "nuisance" issues rather than actual damage to property. The Crow Peak Bench area of the northern Black Hills remains the principle area for depredation concerns. Increased numbers of Any Antlerless Whitetail deer licenses were issued for the area in 2003 in an attempt to mitigate some of the problems that routinely occur in mid-late winter and in spring as alfalfa begins to green up. Landowner tolerance for customary deer numbers may be moderating to some degree as people learn how to better live with the animals and the Department is able to assist landowners with more permanent solutions to undesirable deer use of private lands. These occurrences are difficult to classify as depredation.

### **Outlook**

Given the mild winters since 2001, the outlook for the Black Hills Deer population appears very good. Four large wild land forest fires occurred in the Black Hills during the summer and early fall of 2002 that will provide much needed habitat improvements, mostly on winter range. Deer came through the winter in good shape so it is likely that fawn production and recruitment will improve slightly. Predation of fawns by coyotes remains a concern and the increase in mountain lions could present some additional limiting factors requiring more cursory review. Buck Only license numbers are projected to remain the same for the 2004 hunt at 5000 permits. Any Deer permits will remain nearly the same in number for the 2004 season while Any Antlerless Whitetail licenses will be increased to address population growth and buck/doe ratios. Deer population estimates in the Black Hills remain between 40,000 to 45,000 animals. Given the nominal improvements in habitat created by both forest management and the fires of 2001, 2002 and again in 2003, it is expected that the Black Hills deer population can be further expanded in selected areas. Given the growing conflicts with suburbanites and small tract property owners, mostly on the fringes of the Black Hills, it is likely that herds using those areas will need to stabilize at present levels. Concerns regarding fawn production and recruitment, Chronic Wasting Disease that was found in the Black Hills during the 2002 and 2003 hunting seasons, urban encroachment further into the Black Hills, demand for Black Hills Deer hunting licenses, Forest Service management practices and landowner tolerance issues are problems that continue to confront managers and biologists alike. Work has been done, and continues, in concert with the US Forest Service Forest Plan objectives to provide improvements in land management for deer on the National Forest. Work has also been initiated in the Norbeck Wildlife Preserve to manage that area exclusively for game animals and birds after several years

of litigation that culminated in court and Forest Service decisions favorable to wildlife. Expanded CWD investigations are planned for the 2004 hunt to further determine the extent and distribution of the disease in the forest and western South Dakota prairie. The Rocky Mountain Elk Foundation and other NGO's are working on land purchases and conservation easements in attempts to stem the tide of suburban sprawl and preserve deer and elk habitat throughout the Black Hills. Unfortunately, expanded deer hunting opportunity in the Black Hills does not appear to be a possibility in the near future. The present management plan appears to be working well to serve the needs of the deer herd, the habitat and most of the agricultural producers in the Black Hills. Even though some population growth has occurred, a commensurate increase in hunting licenses does not appear possible or in the best interests of the resource.

## **ANDY LINDBLOOM: REGIONAL WILDLIFE MANAGER, REGION 2**

### **Population Status**

Deer populations along the Missouri River and adjacent counties should be in good shape for hunters in 2004. Overall, County Wildlife Assessments continue to show increasing deer populations throughout most of the Missouri River Region. Hunter harvest in the 2003 deer season was higher than in 2002 and deer populations in some units continue to grow while others are stable. A few units did experience population declines in localized areas, most likely attributable to isolated outbreaks of Epizootic Hemorrhagic Disease (EHD). The winter of 2003/2004 was mild and spring conditions in 2004 have been favorable, with timely precipitation and good vegetative growth in most parts of the region. Reproduction is predicted to be good for 2004.

As usual, a few deer were collected last year and submitted to SDSU diagnostics laboratory for disease testing. No results indicated concerns on a population scale. Several deer were also submitted for CWD tests but all test results were negative. Region 2 presumably experienced some severe local outbreaks of EHD in some parts of the region, mostly in counties south of the White River and west of the Missouri River.

### **Harvest**

Deer hunting regulations in South Dakota took on some significant changes in 2003, all of which collectively appeared to increase harvest in region 2. In 2003, hunting seasons were extended 1 week longer for both East and West River deer seasons, and all unused and unsold tags converted to antlerless deer types. In addition, converted tags could be used during an added-on late season that went from January 1 through 11. Costs for antlerless tags were also reduced, and the total allowable number of licenses per hunter per season type increased from 3 to 5. Furthermore, unsold tags were made available over-the-counter at several license agent offices for the East River season. We did receive a few complaints from landowners and certain hunters about the extended seasons, and there were mixed feelings about the effectiveness of the extended vs. the January seasons, but the majority of comments received were positive and supportive of the changes made.

Hunter success in region 2 for 2003 East and West River deer seasons averaged 58%, similar to 61 experienced in 2002. Weather conditions for opener weekends was favorable for good harvest in most units, but some areas experienced challenging conditions such as above normal temperatures and thick fog. Total predicted deer harvest for region 2 was 14,442 deer, which is about 13% higher than the estimated 12,819 deer harvested last year and about 53% higher than the estimated 9,431 deer harvested in 1999. Harvest of white-tailed does in 2003 was 6,006, approximately 132% higher than it was 5 years ago.

The number of deer licenses made available has also increased substantially in the last 5 years, going from 12,680 licenses in 1999 to 19,820 in 2003. In 2003 we sold 17,181 licenses and had only 2,639 unsold licenses, whereas in 2002 we sold 15,662 licenses and had 4,538 leftover.

Youth deer hunter success was approximately 56% statewide in 2003. The number of youth hunter applicants and harvest has remained fairly stable over the last 3 years, although last year appeared to be slightly higher. Youth hunters can take advantage of many hunting opportunities unique to the youth in region 2.

Archery hunters continue to grow in number across the state. Only about 22% of the deer harvested by hunters with general archery licenses in 2003 were antlerless (compare with 47% west-river rifle deer, 60% east-river rifle deer). Interest in the antlerless archery season, however, continues to slowly increase and approximately 1,152 antlerless deer were harvest last year with these licenses. Highest deer harvest by general archers in region 2 came from Campbell and Potter counties in 2003.

Interest in muzzleloader hunting also continues to rise. In 2003 more than 1,400 deer were projected harvested by muzzleloader hunters statewide, with the highest harvest in region 2 coming from Brule (110 deer) and Mellette (64) counties.

Overall the 2003 deer hunting season resulted in record numbers of deer harvested. Over the last 5 years, region 2 has been trying to manage an increasing white-tailed deer population, and with the combined losses from presumably EHD outbreaks and hunter harvest, we appear to be gaining control on deer populations in some units of the region. Unfortunately, harvest was still inadequate to achieve management goals in many units and deer populations continue to rise in these areas. Department personnel are still concerned about producer tolerances and damages to private lands if we experience a harsh winter in 2004/2005. Annual increases in commercial deer hunting ventures, shooting preserves, and additional private lands closed to deer hunting continue to obstruct sufficient deer harvest. In addition, hunter distribution problems, unsold licenses, and poor harvest of the antlerless population complicate deer management in region 2.

### **Depredation**

Deer complaints over the past year have been few and far between. Mild weather conditions have allowed deer to spread out across the landscape and few landowners experienced depredation problems in the winter of 2003/2004. Brule, Hyde, Hand, and Mellette counties experienced the majority of depredation complaints in the region last year, and deer population levels in those areas are above management objectives. Other counties received only minimal deer depredation complaints, and those were primarily regarding stored feed or standing crops. Region 2 has been encouraging landowners in traditional problem areas to be proactive in protecting stored feed, and approximately 88 protective cooperative stackyard contracts over the past fall/winter/spring have been completed in preparation for normal winter conditions and deer depredation. In addition, last year about 6 landowners completed over-winter food plots under contract for the department to better manage deer distribution in problem winter areas.

### **Outlook**

Hunters pursuing deer in the Missouri River region of the State should have ample opportunities for a successful hunt in 2004. Harvest projections in 2003 were at all time highs in many units and deer populations are stable to increasing in many parts of the region. Hunters may experience lower deer numbers in some localized areas, however, particularly in some parts of the counties west of the Missouri River and south of the White River. The preceding winter was mild and fawning habitats this spring appeared to be in good condition. Region 2 is offering approximately 400 more deer licenses East River this year and approximately 900 less West River. Staff supports the deer regulation changes made last year and is hopeful this will encourage and provide opportunities for increased antlerless harvest in 2004.



**RON SCHAUER: REGIONAL WILDLIFE MANAGER, REGION 3**

**Population Status**

Deer populations continued to show steady growth throughout most of Region 3. A few of the counties are starting to curb the growth as a result of increased hunting pressure. This is a start, but we still need to keep the pressure on the deer and bring populations more in line with our goals and landowner tolerance. Another mild winter and good habitat conditions were the major reasons for the increases. Disease was not a problem in 2003. There were a few isolated reports of sick or dead deer scattered throughout the region but nothing to be overly concerned about. CWD or EHD was not found in any of the deer that were taken to the diagnostic lab for examination. Two deer tested positive for BVD and three deer tested positive for Strongyloidosis or threadworms. Landowner tolerance was fairly good, but down a little from previous years. We are however, getting more deer complaints during the growing season. These complaints involve deer damaging sweet corn, seed corn and melons. We also worked several deer depredation complaints involving deer damage to trees and/or alfalfa. The total number of deer complaints was up a little over last year, but well below the average during a tough winter.

**Harvest**

Overall deer harvest was up significantly in 2003. This was due to increased tag numbers, hunter harvest and a longer season. East River deer hunting success was up about 3% over last year, with a region-wide success rate of about 65%. This figure did not include the success on the second tag of a double tag license, which averaged about 44%. Clay County had the lowest success at 50%, while Hutchinson County had the highest success at 76%. Mild weather throughout most of the region made hunting conditions fairly good. An opening weekend snowfall may have lowered success a little however. Region 3 also had a special season extension for antlerless deer that ran the first 11 days of January. This season proved to be very popular with hunters and landowners and was one of the major reasons for the overall harvest increase. Any hunter that got out and put forth the effort had no problem filling their tag(s). Some nice bucks were also taken.

Archery deer hunters had another very good year, with an overall success rate of about 27% for the general archery season. The highest number of general archery deer were taken in Minnehaha County (236), while the lowest number were taken in Hutchinson County (5). The special antlerless archery season went well too, with a region-wide success rate of about 44%. This was up about 6% over the previous year. Miner County had the lowest success at 8%, while a sub-unit in Union County had the highest success at 65%. Mild weather, good hunting conditions and high deer populations were the major reasons for the high hunter success.

Muzzleloader deer hunters did well in 2003, with an overall success rate of about 36%. Lincoln County had the lowest success at 20%, while Sanborn County had the highest success at 48%. Good hunting conditions and high deer populations also helped the muzzleloader hunters have a good year. Overall harvest and success could be increased, if the season allowed for some buck harvest and an earlier opener. Several hunters also commented that the deer seemed spookier. This was probably caused by the late East River Deer season extension, which overlapped a portion of the muzzleloader season.

Youth deer hunters had an overall success rate of about 54%. This was up about 6% over last year. Davison County had the lowest success at about 43%, while Moody County had the highest success at about 71 %. The youth deer season remains very popular and the late season gives kids some added time in the field and another chance to fill their tag.

All things considered, Region 3 had a very good year for deer and deer hunters. Hunting conditions were pretty good except for an opening weekend snowfall, which may have hindered hunter's efforts a little. The late January extension for antlerless deer was very well received by both landowners and hunters. It allowed us to harvest more antlerless deer and hopefully bring overall deer population down to more manageable levels. Violations were up a little over last year. Several complaints and citations were

issued for shooting from motor vehicles, roadways and shooting deer prior to the season opener. There was also some license lending and tagging problems as well. Some real nice heads were seized as evidence in many of these cases.

#### **Depredation**

Deer depredation complaints were up a little over 2002. Mild weather and a good crop harvest kept complaints at a manageable level. More complaints were received involving deer damage to trees, seed corn, sweet corn and melons. These complaints are tougher to work because they occur in the spring and summer and hunters cannot be used to address the problem until fall. Region 3 did not have any depredation pool hunts but we did utilize kill permits to address a few deer and turkey complaints that could not be handled by any other means.

#### **Outlook**

The outlook for the coming year should be excellent. As a result of the mild winter, good reproduction and habitat conditions, overall deer populations should be stable or up slightly in 2004. Tag numbers should also be up and hunters will have plenty of opportunity to harvest deer in 2004.

### **WILL MORLOCK: REGIONAL WILDLIFE MANAGER, REGION 4**

#### **Population**

The 2003 season had excellent weather conditions. The deer herd was in excellent condition going into the season. Reproduction was normal during the year. We had a large herd of deer going into the spring. Most Wildlife Conservation Officers felt that the population was above where they wanted the herd to be. Hunter success was good. All of the available tags and licenses were sold. There were no reports of any losses due to any diseases, such as EHD. Testing for CWD was done in McPherson and Deuel Counties with all results being negative.

#### **Harvest**

Opening weekend of East River firearms deer was mild and continued throughout the season. Hunters had ample opportunity to fill their tags. Hunter harvest was near normal in nearly all units. Hunter success was below 60%. This is lower than what we have had the past several years. The new system to make leftover licenses more readily available seemed to work as all licenses were sold. Extension of the season an additional week in December and the added days in January increased the antler-less kill significantly and will be recommended to be continued in 2004. Archery hunters had normal success. The archery harvest remains at nearly 30% with most of the harvest being bucks. Antlerless only tags harvest is good and has become an aid in controlling the herd numbers. More tags will be available for this group of hunters.

Muzzleloader hunters had good success. This group, along with archery hunters, seems to have little trouble gaining access to private lands. Hunter ethics remain high.

Youth Season hunters enjoyed a good season. The success remains constant at approximately 55-60%. The youth season is a very good season as it is presently structured. The addition of the December season dates has made this a better season. It also allowed for more harvest of deer by this group of hunters and it provides more recreational opportunities.

Violations were down and reports of violations appeared to be down. Weather conditions made it pleasant for hunters to walk fields and hunt from stands. Hunter distribution is still improving. More hunters are waiting until the 'opening day' rush is past before they venture out to hunt.

### **Depredation**

Depredation was not a problem during this winter. We handled 15 reports of depredation. These were extremely minor and were handled with one visit. We did complete 6 stack-yard contracts with landowners that should help future complaints.

### **Outlook**

Most units report to many deer for the habitat and winter feed supply. The spring and summer conditions will determine herd growth. License number projections will be raised slightly. The herd has been stabilized to a more tolerable level. Present hunter numbers appear to be harvesting the maximum that they can use. We either need to recruit new hunters or find ways for our hunters to dispose of deer.

# FIGURES

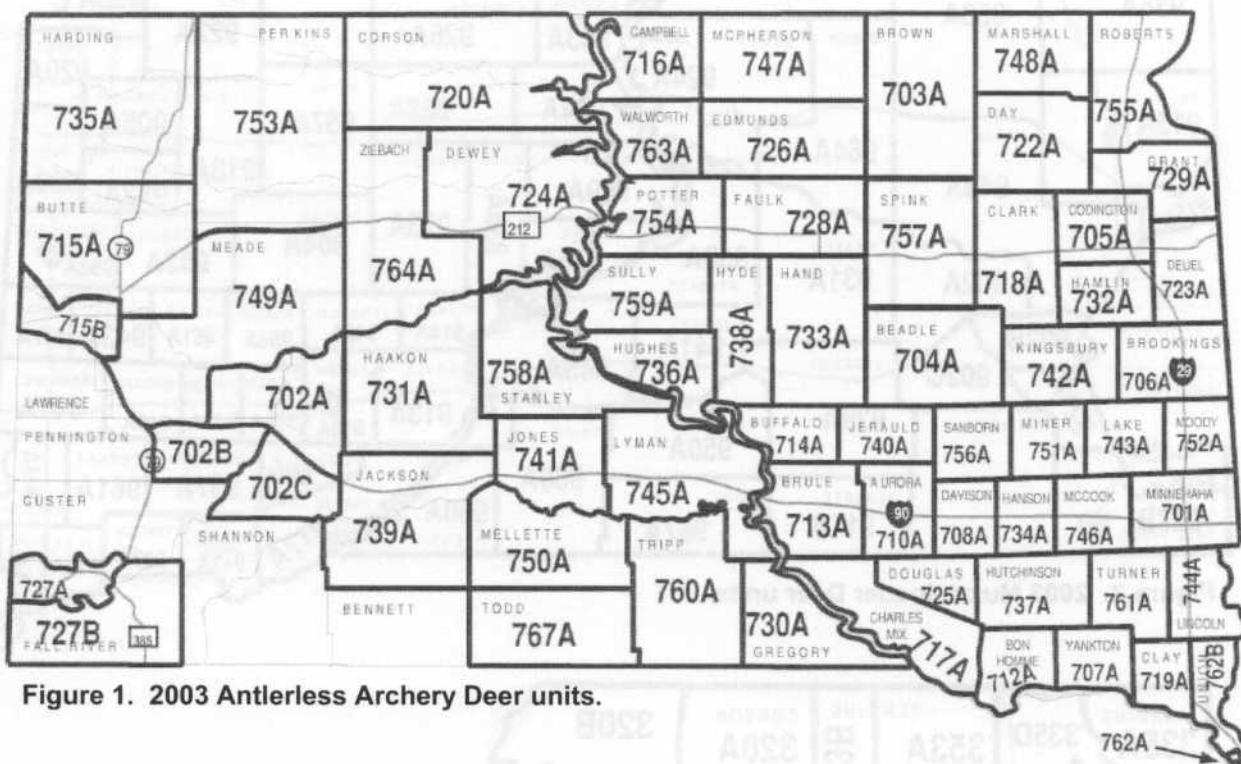


Figure 1. 2003 Antlerless Archery Deer units.

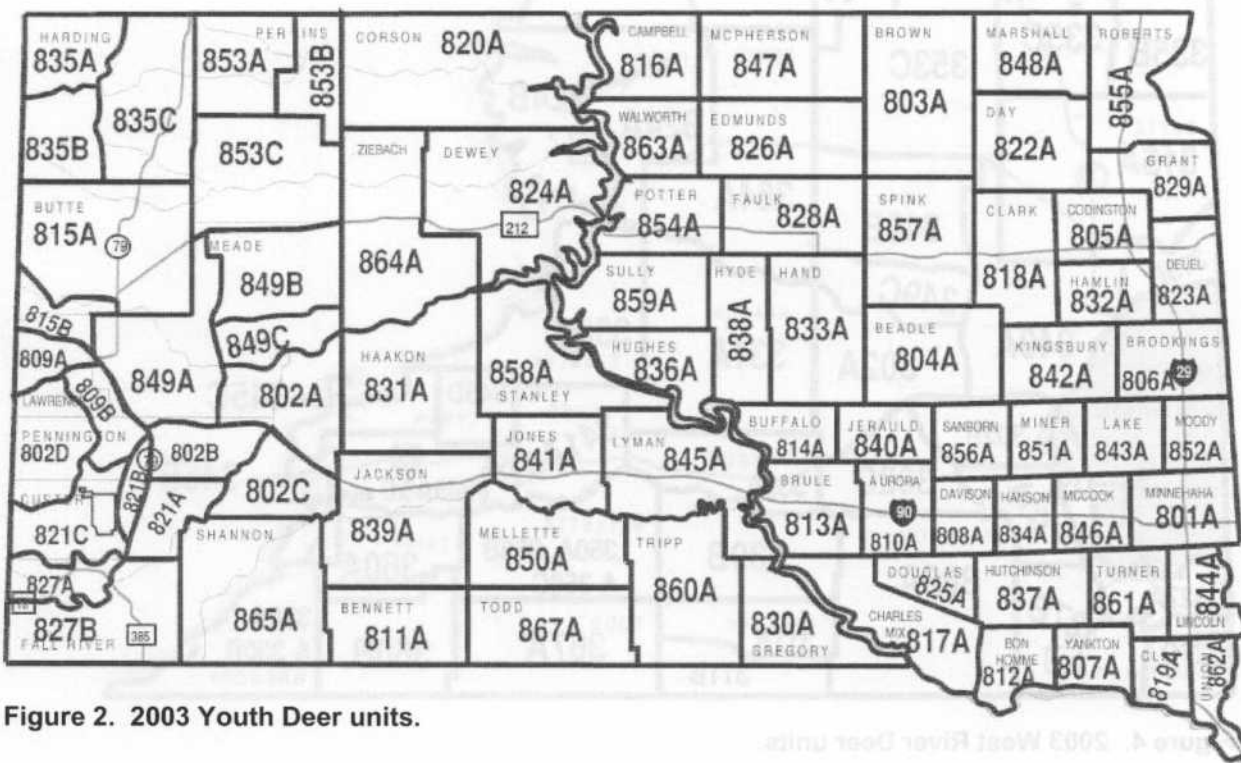


Figure 2. 2003 Youth Deer units.



Figure 3. 2003 Muzzleloader Deer units.

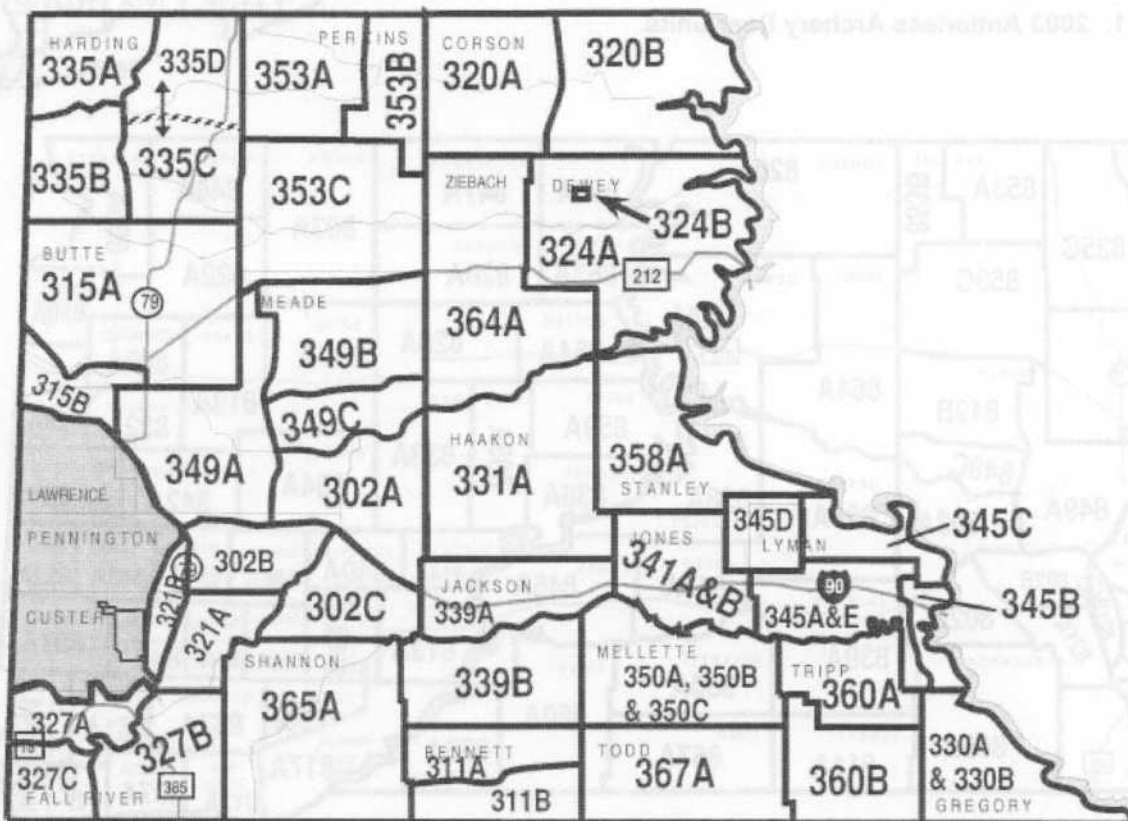


Figure 4. 2003 West River Deer units.

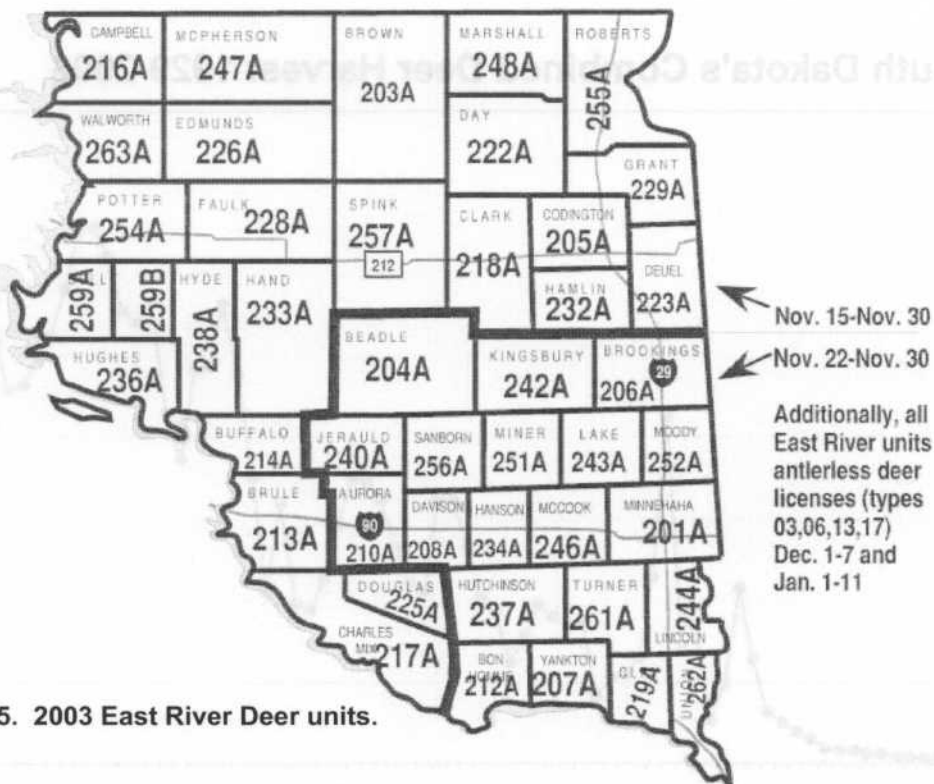


Figure 5. 2003 East River Deer units.

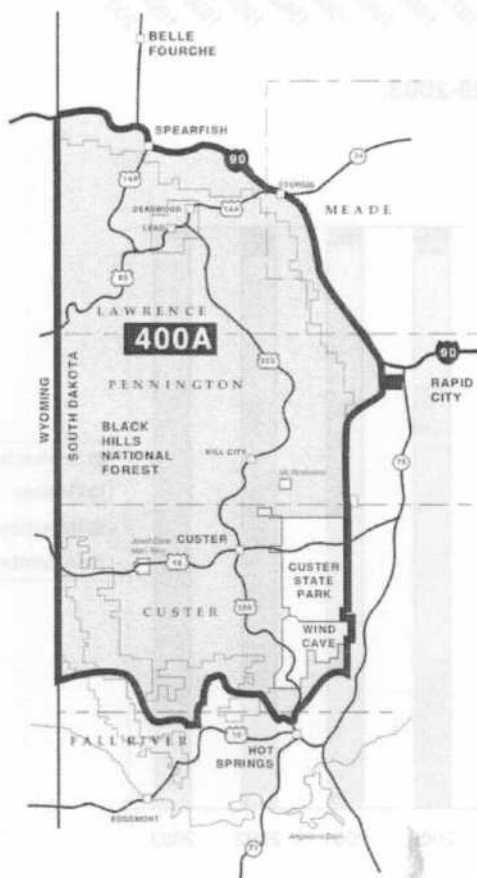


Figure 6. 2003 Black Hills Buck unit.

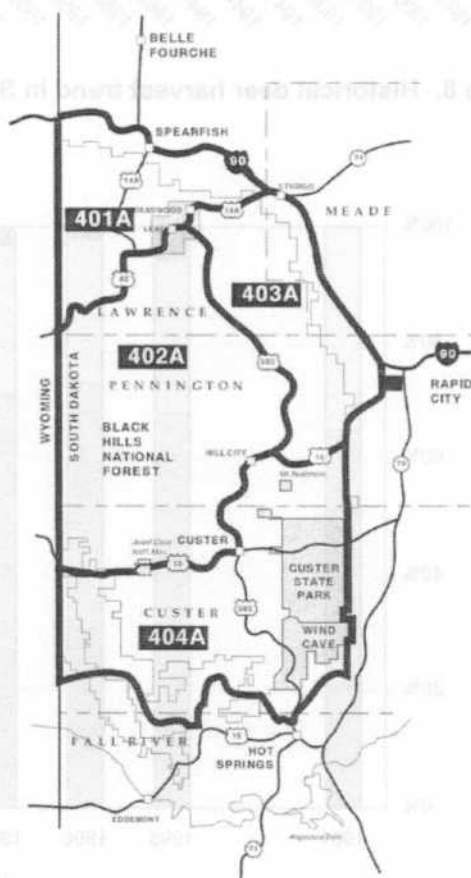


Figure 7. 2003 Black Hills Special Deer units.



Figure 8. Historical deer harvest trend in South Dakota, 1929-2003.

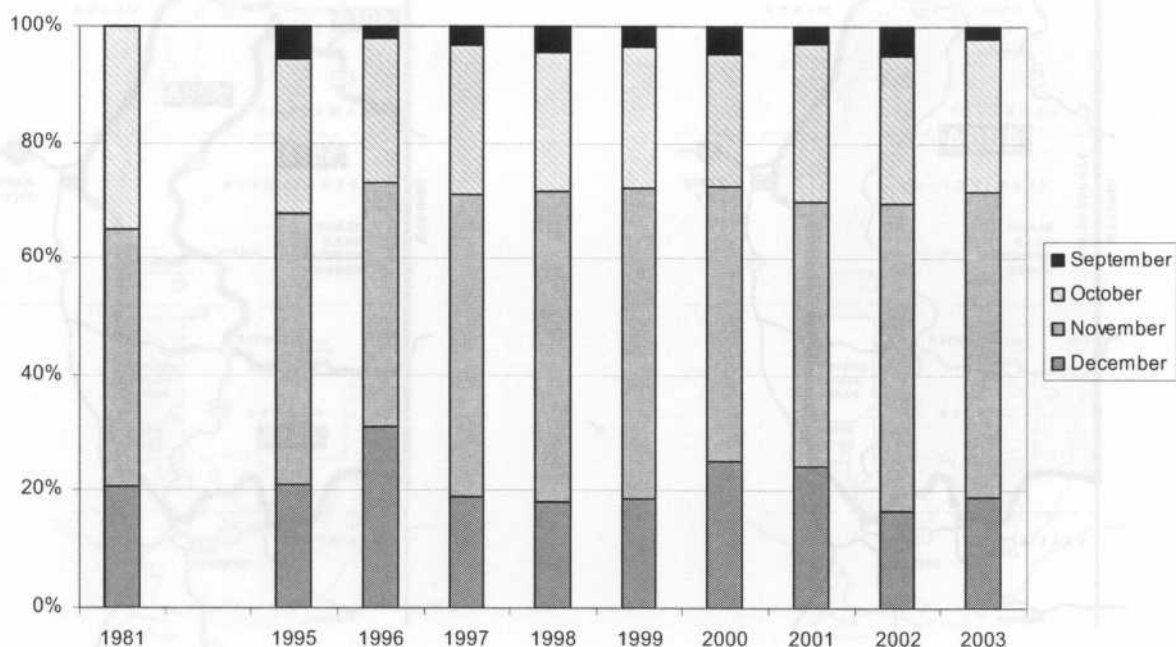


Figure 9. Monthly distribution of general archery harvest from 1981 and 1995-2003.

## Antlerless Archery Deer 1997-2003

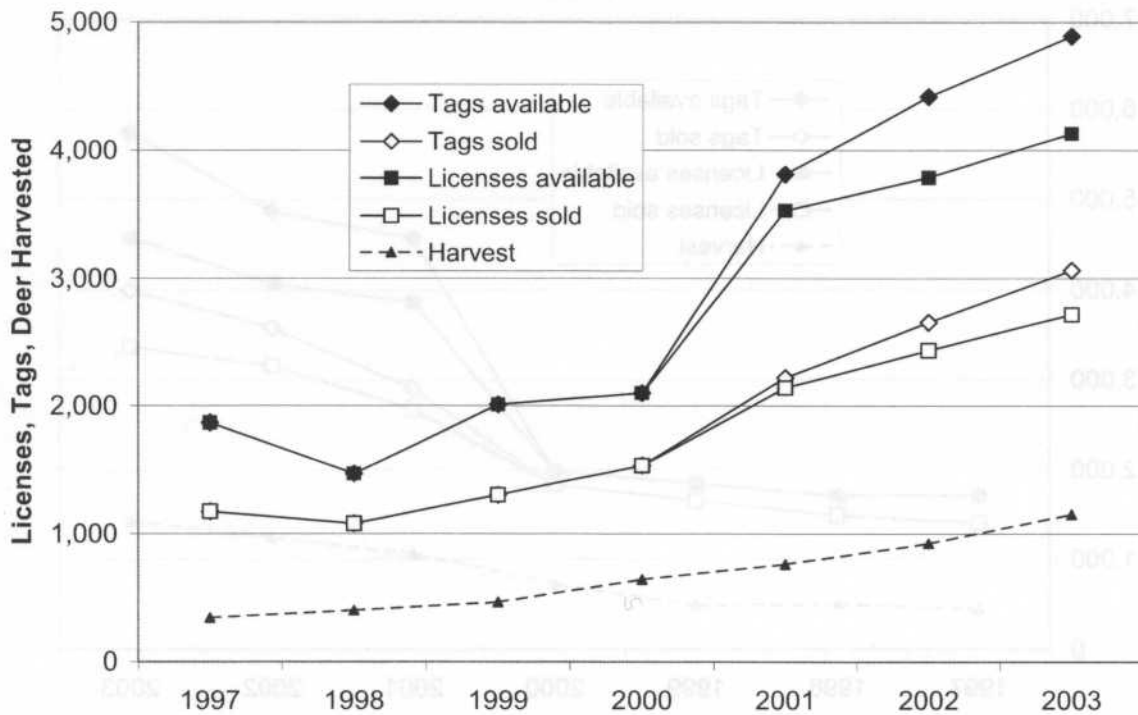


Figure 10. Antlerless Archery deer license/tag sales and harvest trends.

## Youth Deer 1997-2003

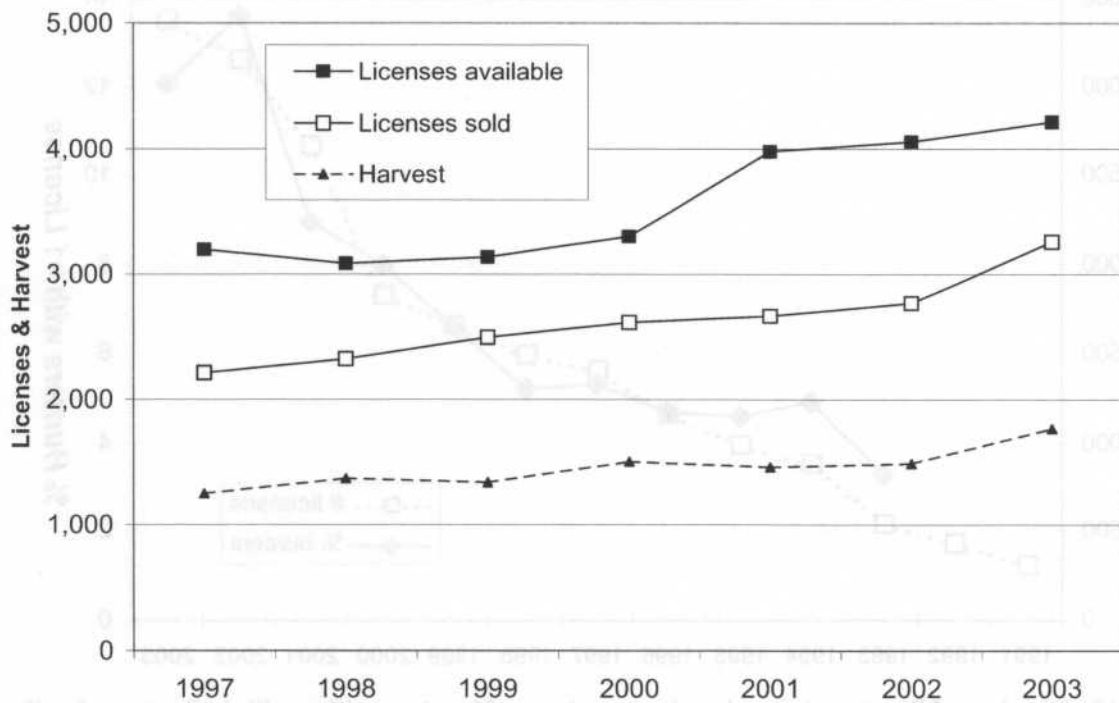


Figure 11. Youth deer license sales and harvest trends.



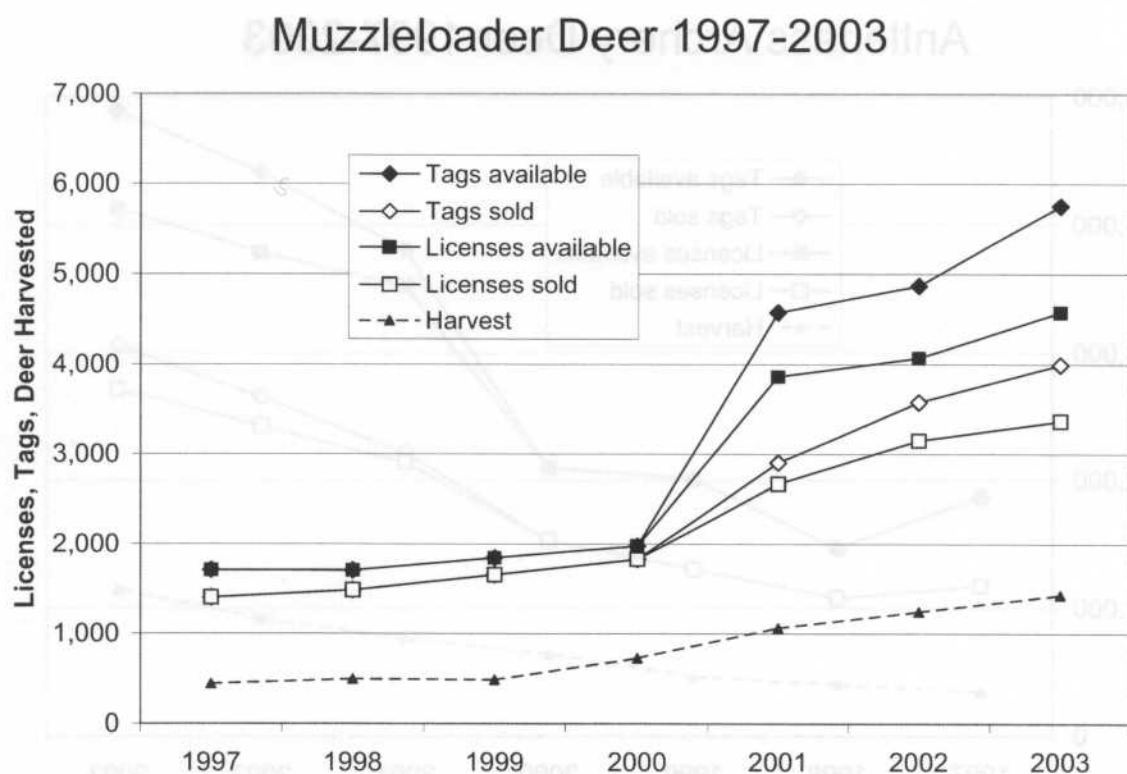


Figure 12. Muzzleloader deer license/tag sales and harvest trends.

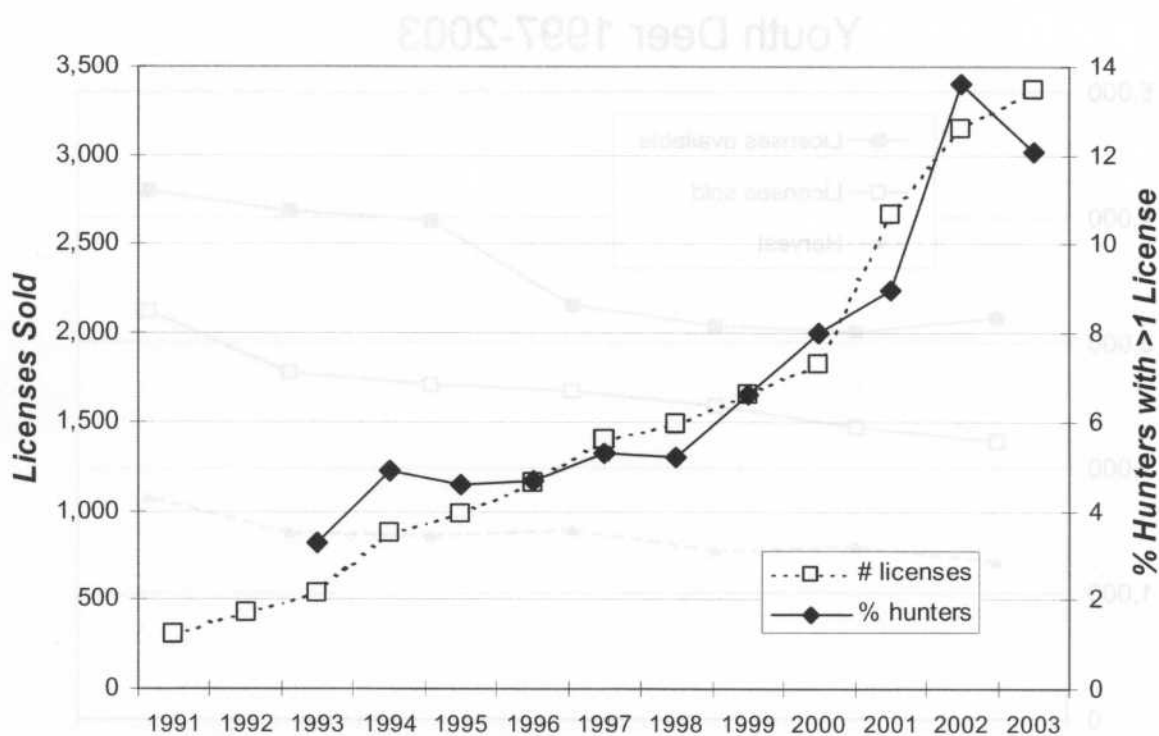


Figure 13. Number of licenses issued and percentage of hunters with multiple licenses for the muzzleloader deer season, 1991-2003.

## West River Deer 1997-2003

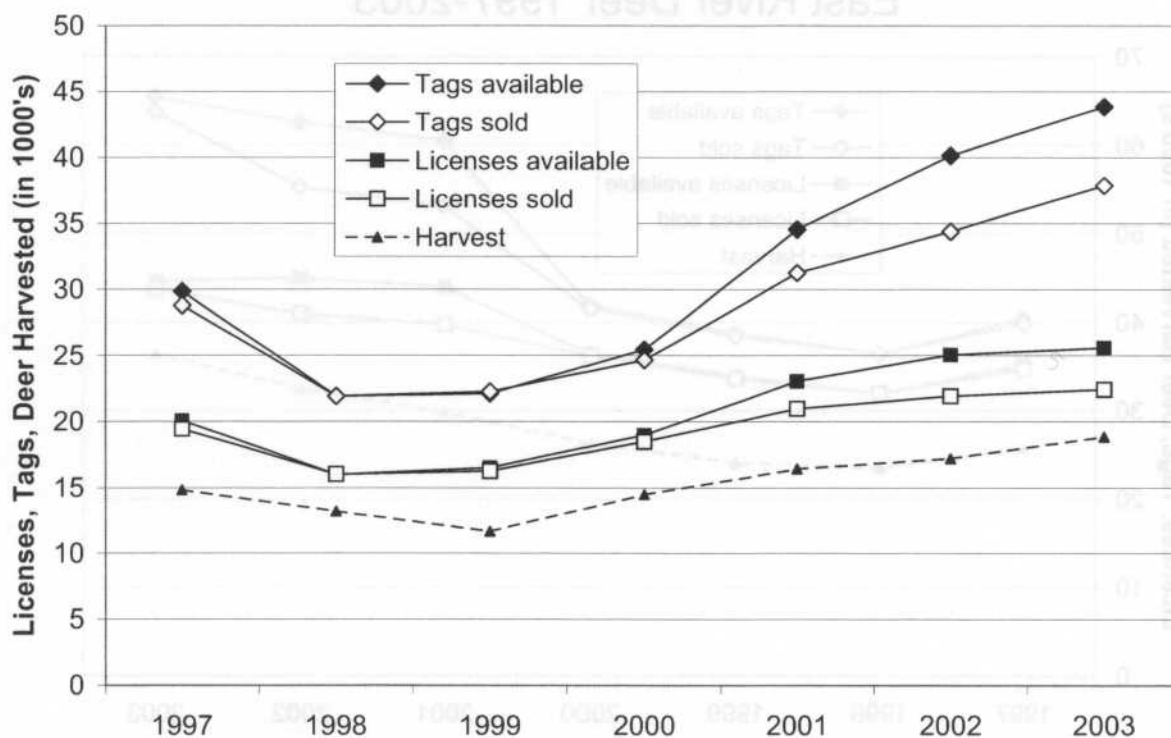


Figure 14. West River deer license/tag sales and harvest trends.

## West River Prairie Firearm Deer Harvest

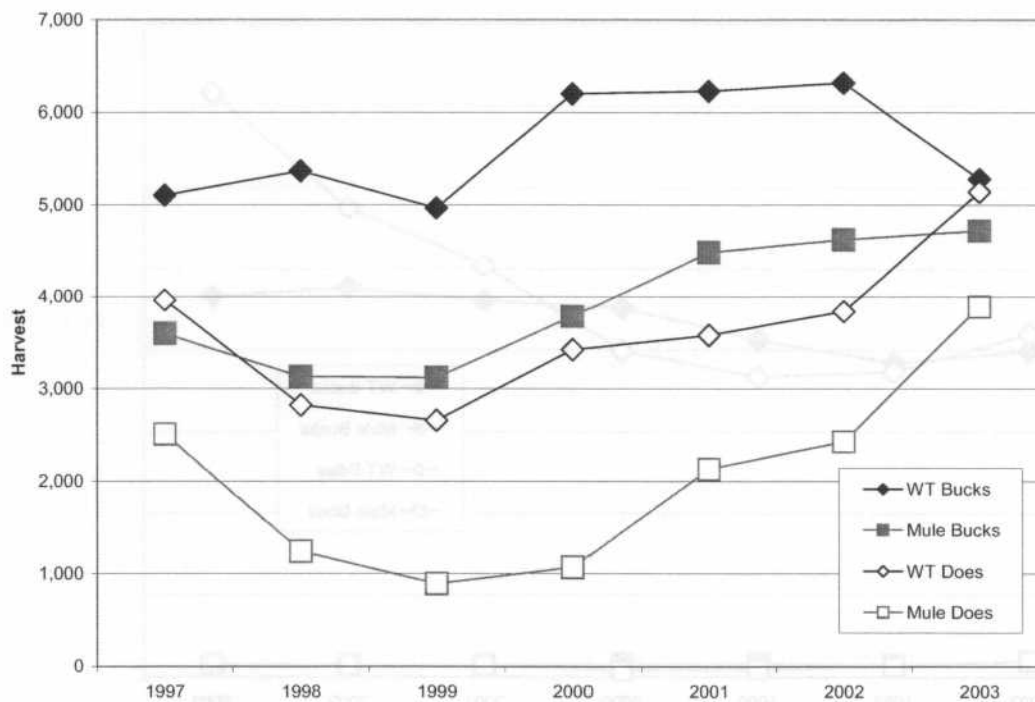


Figure 15. West River deer regular season harvest distribution, 1997-2003.

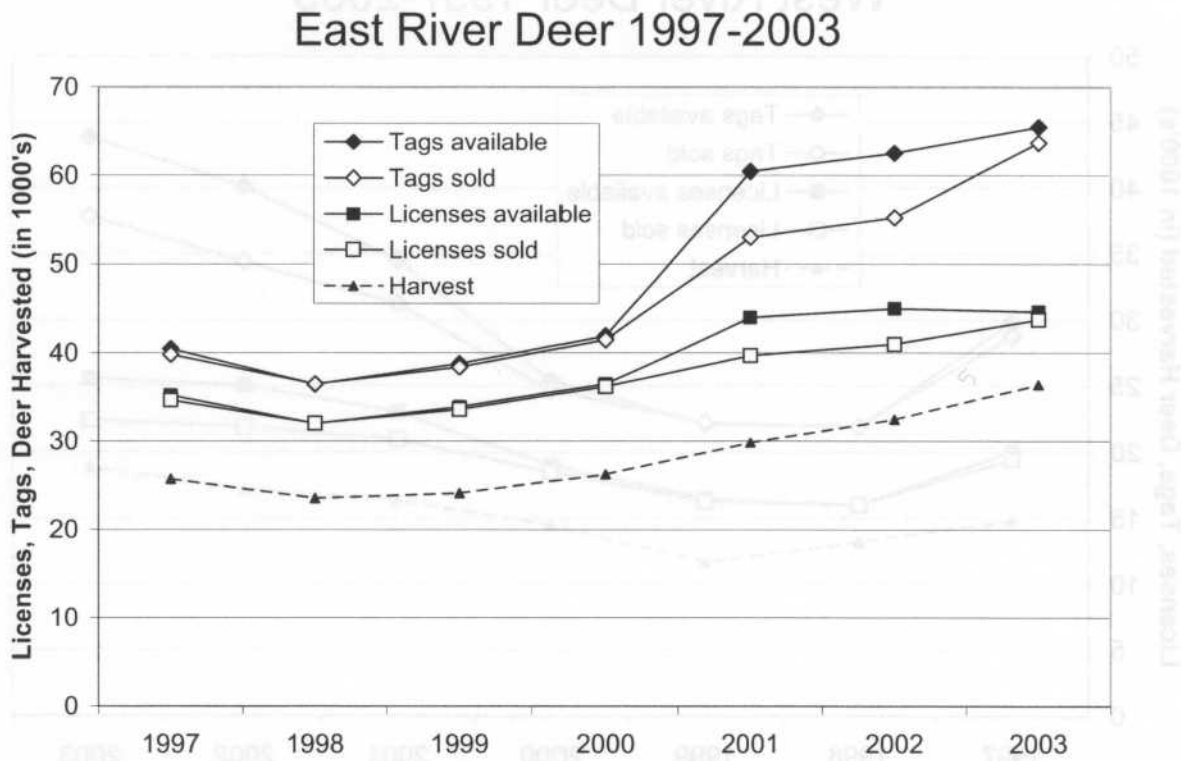


Figure 16. East River deer license/tag sales and harvest trends.

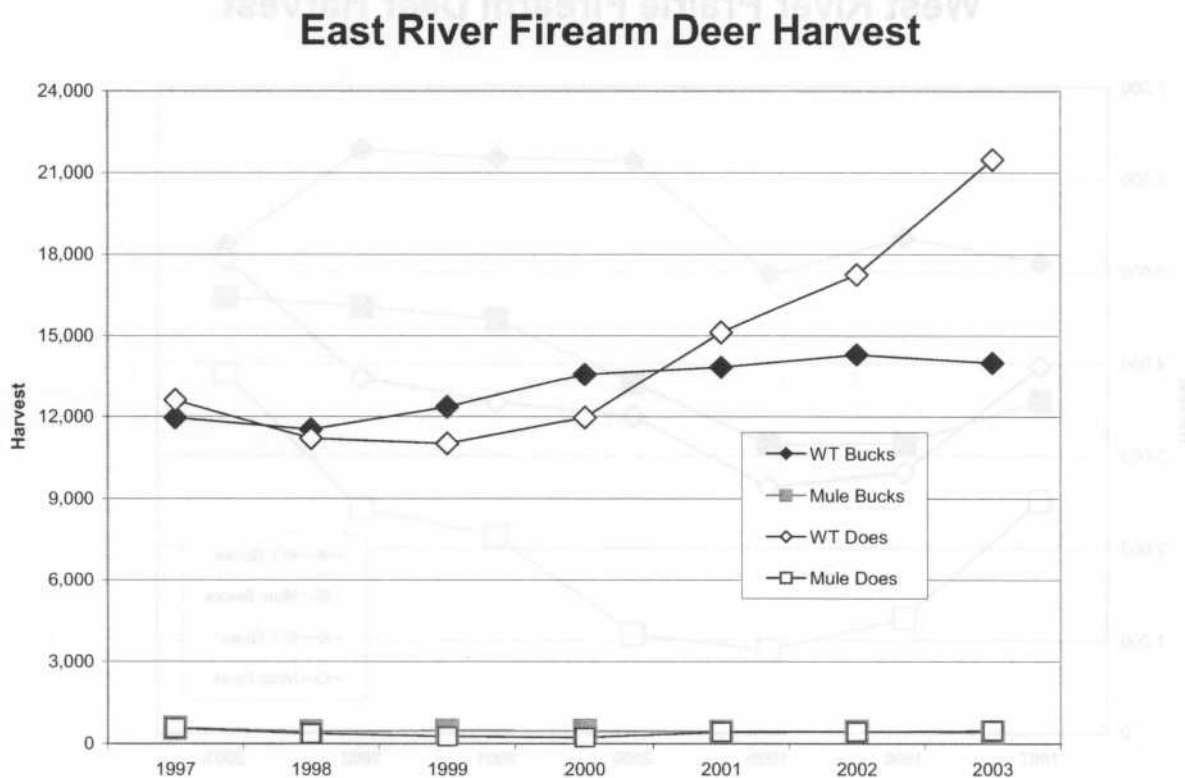


Figure 17. East River deer regular season harvest distribution, 1997-2003.

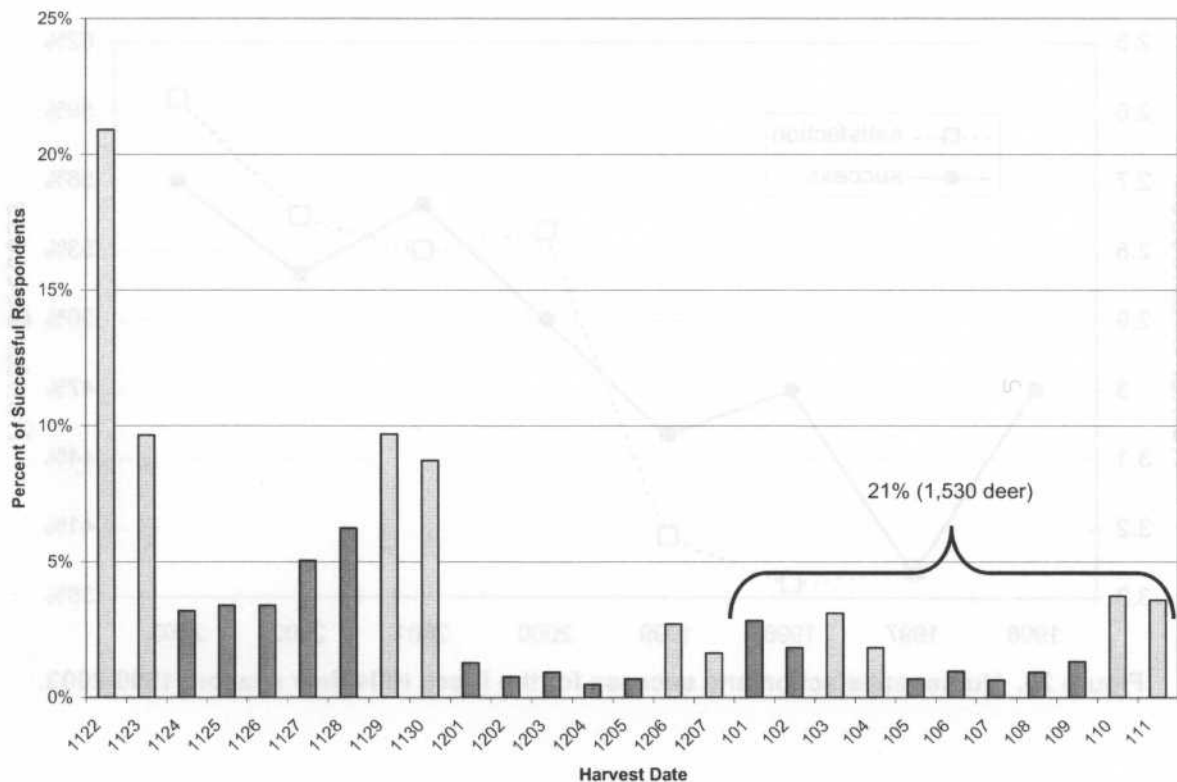


Figure 18. East River Region 3 antlerless deer harvest by date (total harvest: 7,159).

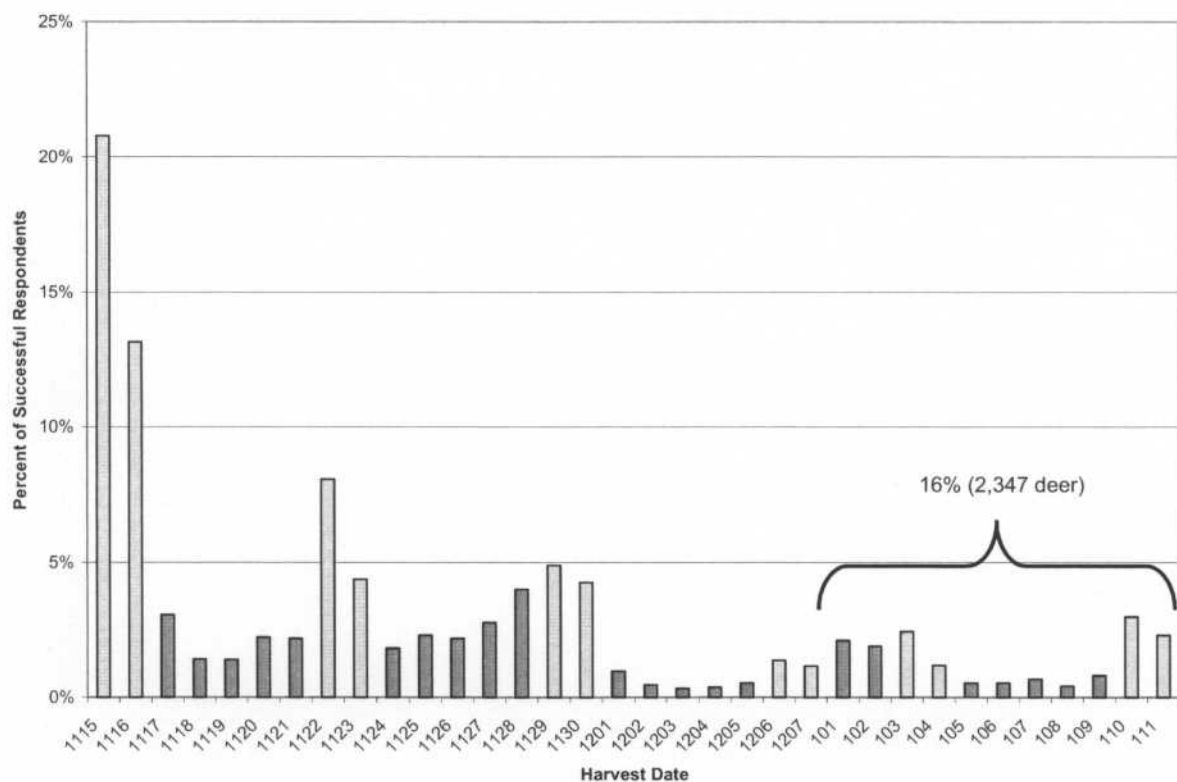


Figure 19. East River Regions 2 & 4 antlerless deer harvest by date (total harvest: 14,779).

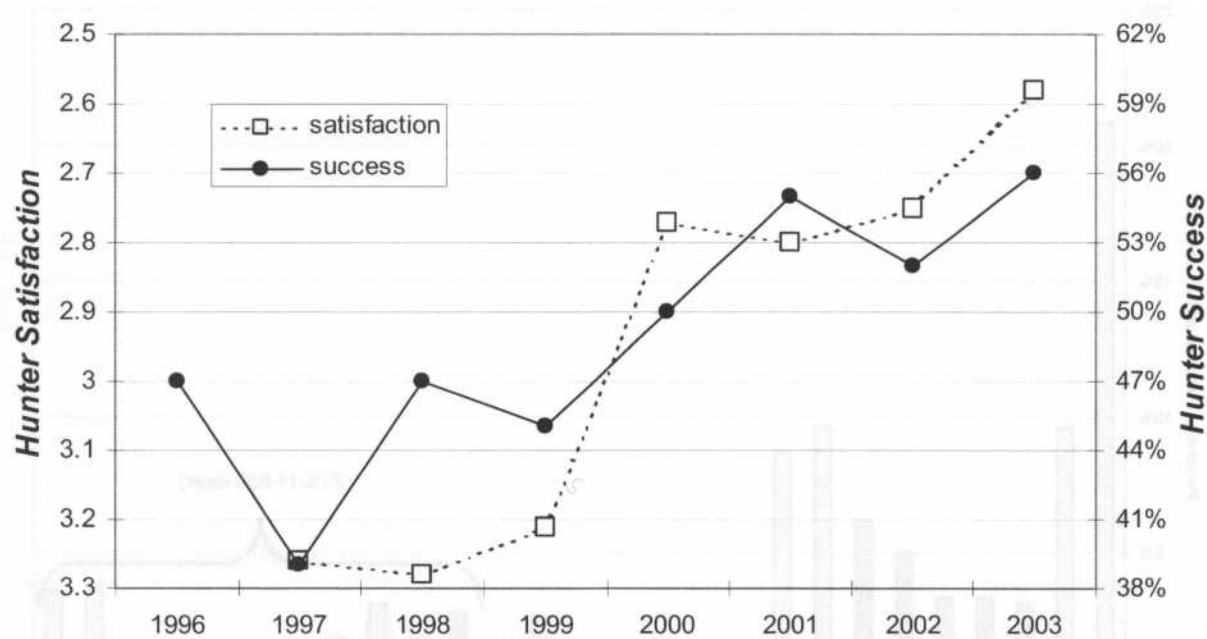


Figure 20. Hunter satisfaction and success for the Black Hills deer season, 1996-2003.

# TABLES

Table 1. Summary of South Dakota's 2003 deer seasons, license sales, and harvest projections.

## 2003 Statewide Deer Harvest Projection Summary

last revised: 21 April 04

SOUTH DAKOTA	Season	General Archery	Antlerless Archery	Youth Antlerless	Muzzleloader	West River	West River Special Buck Unit	West River Landowner	East River	East River Special Buck Unit	East River Landowner	Sand Lake NWR	Lacreek NWR	Waubay NWR	Black Hills	Custer State Park	Grand Totals
Harvest Statistic																	
Licenses/Tags												Refuges					
Resident Licenses																	
Available	Unlimited	4,130	4,215	4,570	23,970	400	Unlimited	44,585	399	Unlimited	550	40	65	5,900	42		88,866
Sold/Issued	11,628	2,642	3,173	3,307	20,449	400	752	42,872	399	2,575	540	40	67	5,965	38		94,847
Resident Tags																	
Available	Unlimited	4,890	4,215	5,755	41,065	400	Unlimited	65,485	399	Unlimited	550	40	65	5,900	42		128,806
Sold/Issued	11,628	2,976	3,173	3,903	34,226	400	944	62,079	399	3,089	540	40	67	5,965	38		129,467
Nonresident Licenses																	
Available	Unlimited	leftovers	leftovers	leftovers	1,934	400	N/A	leftovers	N/A	N/A	45	4	6	472	N/A		2,861
Sold/Issued	1,367	73	59	59	2,305	400	N/A	837	N/A	N/A	54	4	4	473	N/A		5,635
Nonresident Tags																	
Available	Unlimited	leftovers	leftovers	leftovers	3,314	400	N/A	leftovers	N/A	N/A	45	4	6	472	N/A		4,241
Sold/Issued	1,367	86	59	89	3,967	400	N/A	1,581	N/A	N/A	54	4	4	473	N/A		8,084
Total Licenses																	
Available	Unlimited	4,130	4,215	4,570	25,904	800	Unlimited	44,585	399	Unlimited	595	44	71	6,372	42		91,727
Sold/Issued	12,995	2,715	3,232	3,366	22,754	800	752	43,709	399	2,575	594	44	71	6,438	38		100,482
Total Tags																	
Available	Unlimited	4,890	4,215	5,755	44,379	800	Unlimited	65,485	399	Unlimited	595	44	71	6,372	42		133,047
Sold/Issued	12,995	3,062	3,232	3,992	38,193	800	944	63,660	399	3,089	594	44	71	6,438	38		137,551
Hunting Recreation																	
Average Days Hunted	11.87	11.77	4.05	5.18	3.49	3.50	4.02	4.40	5.01	4.42	2.60	2.40	1.74	4.01	2.10		5.33
Total Days Hunted	154,251	31,956	13,090	17,436	79,411	2,800	3,023	192,320	1,999	11,382	1,544	106	124	25,816	80		535,338
Mean Satisfaction Score	2.57	2.43	2.52	2.75	2.83	2.44	2.67	2.86	2.80	2.95	2.72	2.42	2.45	2.58	UNK		
Harvest																	
White-tailed Deer																	
Bucks	2,470	87	264	184	5,278	189	132	13,984	213	1,054	168	10	31	2,427	11		26,502
Does	705	1,021	1,234	974	5,141	0	47	21,473	0	438	49	5	13	402	18		31,520
Total	3,175	1,108	1,498	1,158	10,419	189	179	35,457	213	1,492	217	15	44	2,829	29		58,022
Mule Deer																	
Bucks	280	7	30	23	4,717	390	219	418	13	57	1	0	0	694	1		6,850
Does	85	37	243	249	3,888	0	50	466	0	10	1	0	0	53	0		5,082
Total	365	44	273	272	8,605	390	269	884	13	67	2	0	0	747	1		11,932
Total Deer Harvest																	
Bucks	2,750	94	294	207	9,995	579	351	14,402	226	1,111	169	10	31	3,121	12		33,352
Does	790	1,058	1,477	1,223	9,029	0	97	21,939	0	448	50	5	13	455	18		36,602
Total	3,540	1,152	1,771	1,430	19,024	579	448	36,341	226	1,559	219	15	44	3,576	30		69,954
Success																	
	27%	38%	55%	36%	50%	72%	47%	57%	57%	50%	37%	34%	62%	56%	79%		51%

Table 2. General Archery deer season license sales and harvest, 1956-present.

YEAR	Res Licenses Sold	NR Licenses Sold	Total Harvest	Hunter Success
1956	622	11	unknown	unknown
1957	514	5	unknown	unknown
1958	817	9	unknown	unknown
1959	1,126	17	unknown	unknown
1960	746	3	unknown	unknown
1961	1,002	7	unknown	unknown
1962	1,088	5	unknown	unknown
1963	1,193	6	unknown	unknown
1964	1,979	7	unknown	unknown
1965	1,861	8	unknown	unknown
1966	2,724	14	763	28%
1967	2,827	19	708	25%
1968	3,406	37	960	28%
1969	3,355	62	757	22%
1970	3,544	115	946	26%
1971	4,008	155	1,129	27%
1972	4,187	142	813	19%
1973	5,460	210	857	15%
1974	6,727	322	1,144	16%
1975	7,131	355	1,413	19%
1976	7,584	378	1,921	24%
1977	7,348	432	1,635	21%
1978	6,862	382	1,218	17%
1979	7,068	327	1,108	15%
1980	7,790	319	1,820	22%
1981	9,092	325	2,225	24%
1982	9,738	371	2,622	26%
1983	10,064	425	3,059	29%
1984	10,071	537	2,616	25%
1985	11,170	568	3,105	26%
1986	10,256	504	2,132	20%
1987	10,464	393	unknown	unknown
1988	10,235	408	2,663	25%
1989	10,625	484	3,428	31%
1990	10,524	855	3,152	28%
1991	10,809	504	2,866	25%
1992	11,458	599	3,114	26%
1993	10,091	594	2,878	27%
1994	10,348	718	2,733	25%
1995	9,966	797	2,971	28%
1996	9,858	752	2,799	26%
1997	9,575	605	2,094	21%
1998	9,507	634	2,360	23%
1999	9,254	754	2,248	22%
2000	9,869	840	2,637	25%
2001	10,550	1,049	3,071	26%
2002	11,119	1,137	3,300	27%
2003	11,628	1,367	3,540	27%

Table 3. Antlerless Archery deer season license sales and harvest, 1990-present.

Year	Licenses Available	Tags Available	Licenses Sold	Tags Sold	Total Harvest	Hunter Success
1990	1,955	1,955	487	487	195	40%
1991	1,440	1,440	542	542	228	42%
1992	1,235	1,235	688	688	335	49%
1993	1,950	1,950	978	978	487	50%
1994	2,265	2,265	1,325	1,325	579	44%
1995	2,215	2,215	1,270	1,270	538	42%
1996	2,115	2,115	1,321	1,321	608	46%
1997	1,870	1,870	1,174	1,174	346	29%
1998	1,470	1,470	1,080	1,080	404	37%
1999	2,010	2,010	1,302	1,302	467	36%
2000	2,100	2,100	1,534	1,534	641	42%
2001	3,530	3,810	2,141	2,221	759	35%
2002	3,785	4,415	2,436	2,653	924	35%
2003	4,130	4,890	2,715	3,062	1,152	38%

Table 4. Youth antlerless deer season license sales and harvest, 1990-present.

Year	Res Lic Available	Res Lic Sold	Nonres Available	Nonres Sold	Total Harvest	Hunter Success
1990	2,020	1,124	na	na	724	64%
1991	2,975	1,547	na	na	982	63%
1992	2,740	2,012	na	na	1,208	60%
1993	3,600	2,366	na	na	1,477	62%
1994	3,790	2,474	na	na	1,465	59%
1995	3,835	2,294	na	na	1,357	59%
1996	3,230	2,270	na	na	1,442	64%
1997	3,195	2,210	na	na	1,252	57%
1998	3,085	2,321	na	na	1,282	55%
1999	3,135	2,490	na	na	1,339	54%
2000	3,300	2,609	na	na	1,505	58%
2001	3,980	2,662	na	na	1,461	55%
2002	4,060	2,767	leftovers	59	1,490	54%
2003	4,215	3,173	leftovers	83	1,771	55%

Table 5. Muzzleloader deer season license sales and harvest, 1991-present.

YEAR	Lic Avail.	Lic. Sold	Tags Avail	Tags Sold	Tot Harvest	Success
1991	385	309	385	309	119	39%
1992	645	432	645	432	171	40%
1993	1,020	541	1,020	541	217	40%
1994	1,595	872	1,595	872	343	39%
1995	1,640	984	1,640	984	245	25%
1996	1,545	1,157	1,545	1,157	445	47%
1997	1,705	1,405	1,705	1,405	450	32%
1998	1,700	1,485	1,700	1,485	501	34%
1999	1,840	1,652	1,840	1,652	490	30%
2000	1,975	1,824	1,975	1,824	729	40%
2001	3,860	2,668	4,570	2,902	1,063	37%
2002	4,070	3,149	4,870	3,572	1,244	35%
2003	4,570	3,366	5,755	3,992	1,430	36%



Table 6. West River Prairie deer season license sales and harvest, 1959-present.

YEAR	Res Lic Available	Res Lic. Sold	NR Lic Available	NR Lic. Sold	Total Harvest	Hunter Success
1959	unlimited	7,043			5,470	81%
1960	unlimited	7,316			5,217	71%
1961	unlimited	9,773			6,967	73%
1962	unlimited	11,388			8,152	68%
1963	unlimited	8,475			4,887	58%
1964	5,710	5,183		42	3,475	67%
1965	5,183	7,432		84	6,515	81%
1966	10,410	10,020		213	8,196	80%
1967	15,220	14,237	761	504	11,412	80%
1968	15,160	15,156	unknown	977	12,898	80%
1969	13,230	13,225	unknown	1,114	10,965	77%
1970	11,400	11,139	456	450	8,472	73%
1971	12,480	12,438	499	501	9,426	73%
1972	12,980	12,959	519	520	10,943	82%
1973	15,135	14,989	605	606	13,389	86%
1974	16,830	16,628	673	669	14,002	81%
1975	19,860	19,137	1,589	1,528	15,074	73%
1976	14,670	14,639	1,174	1,172	10,814	68%
1977	10,995	10,990	879	868	7,150	60%
1978	10,000	9,952	800	605	6,155	58%
1979	10,955	10,928	876	864	7,711	65%
1980	10,185	10,125	815	805	7,863	72%
1981	12,515	12,487	1,001	989	9,395	70%
1982	16,420	16,206	1,314	1,234	12,674	73%
1983	20,920	20,085	1,674	1,518	16,267	75%
1984	21,560	20,606	1,725	1,737	20,852	73%
1985	23,165	22,123	1,853	1,395	19,731	65%
1986	24,925	22,099	1,994	1,663	12,858	53%
1987	15,530	15,339	1,242	1,033	10,638	65%
1988	16,610*	16,091	1,330*	1,305	12,691	73%
1989	17,550*	16,886	1,404*	1,425	16,260	69%
1990	16,655*	16,451	1,324*	1,388	16,314	70%
1991	17,625	17,578	1,422	1,313	18,202	72%
1992	19,710	19,421	1,574	1,450	22,717	72%
1993	23,750	23,041	1,901	2,072	25,845	63%
1994	22,120	21,967	1,772	2,022	25,650	67%
1995	25,090	20,501	3,374	3,392	20,726	57%
1996	17,975	17,923	1,443	1,852	17,190	50%
1997	18,585	17,922	1,470	1,488	14,823	51%
1998	14,808	14,773	1,189	1,250	12,528	57%**
1999	15,288	15,061	1,224	1,201	11,637	52%
2000	17,495	16,977	1,468	1,496	14,473	59%
2001	21,350	19,107	1,709	1,864	16,418	53%
2002	23,200	19,878	1,852	2,061	17,203	50%
2003	23,970	20,449	1,934	2,305	19,024	50%

\*These numbers do not include the nonresident licenses converted to Special Buck season licenses because they were part of those originally allotted.

\*\* Success is based on total tags issued (not licenses sold) and deer harvested; refer to Huxoll, Corey. South Dakota Department of Game, Fish and Parks Report, Big Game Harvest Projections. 2003 Game Report No. 2004-01 and previous issues to determine license type and tags issued.

**Table 7. West River Prairie Special Buck deer season license sales and harvest, 1988-present.**

<b>Year</b>	<b>Res License Available</b>	<b>Res License Sold</b>	<b>NR License Available</b>	<b>NR License Sold</b>	<b>Total Harvest</b>	<b>Hunter Success</b>
<b>1988</b>	200	176		24	146	73%
<b>1989</b>	209	90		119	153	73%
<b>1990</b>	225	108		117	177	79%
<b>1991</b>	255	129		126	182	81%
<b>1992</b>	327	152		175	255	78%
<b>1993</b>	380	178		202	287	76%
<b>1994</b>	229	147		82	183	80%
<b>1995</b>	245	135		110	170	69%
<b>1996</b>	250	249	250	251	392	76%
<b>1997</b>	250	248	250	<b>248</b>	344	60%
<b>1998</b>	400	398	400	332	506	70%
<b>1999</b>	400	391	400	372	532	70%
<b>2000</b>	400	399	400	395	559	70%
<b>2001</b>	400	400	400	400	546	68%
<b>2002</b>	400	402	400	402	552	69%
<b>2003</b>	400	400	400	400	579	72%

Nonresident licenses remaining after the initial drawing (not to exceed 400) for regular West River Prairie licenses were originally used for this license pool. In 1996 the number was set at 250 each for residents and nonresidents, and in 1998 the number was raised to 400 each.

**Table 8. West River Landowner deer season license sales and harvest, 1991-present.**

<b>Year</b>	<b>Licenses Sold</b>	<b>Tags Sold</b>	<b>Total Harvest</b>	<b>Ave. Days Hunted</b>	<b>Mean Satisfaction</b>	<b>Hunter Success</b>
<b>1991</b>	120	120		No data collected		
<b>1992</b>	162	162		No data collected		
<b>1993</b>	134	134		No data collected		
<b>1994</b>	159	159	107	3.25	n/a	67%
<b>1995</b>	113	113		No data collected		
<b>1996</b>	148	148		No data collected		
<b>1997</b>	108	108		No data collected		
<b>1998</b>	219	291	140	3.95	3.56	64%
<b>1999</b>	351	390	215	3.74	2.99	55%
<b>2000</b>	450	517	268	3.25	2.68	52%
<b>2001</b>	625	718	318	3.73	2.87	44%
<b>2002</b>	564	748	388	3.96	3.01	52%
<b>2003</b>	752	944	448	4.02	2.67	47%

**Table 9. East River deer season license sales and harvest, 1959-present.**

<i>Year</i>	<i>Res License Available</i>	<i>Res License Sold</i>	<i>NR License Available</i>	<i>NR License Sold</i>	<i>Total Harvest</i>	<i>Hunter Success</i>
<b>1959</b>	5,470	4,182	na	na	3,401	81
<b>1960</b>	3,900	3,463	na	na	3,135	88%
<b>1961</b>	3,848	3,484	na	na	2,864	85%
<b>1962</b>	3,250	3,160	na	na	2,642	94%
<b>1963</b>	3,230	3,195	na	na	2,755	87%
<b>1964</b>	3,900	3,900	na	na	3,549	91
<b>1965</b>	5,550	5,448	na	na	4,770	85%
<b>1966</b>	6,260	6,092	na	na	5,032	82%
<b>1967</b>	7,180	7,186	na	na	5,795	81
<b>1968</b>	8,510	8,107	na	na	6,468	80%
<b>1969</b>	10,060	9,912	na	na	7,780	79%
<b>1970</b>	9,500	9,506	na	na	7,577	80%
1971	9,600	9,577	na	na	7,726	80%
<b>1972</b>	11,265	11,033	na	na	8,641	78%
<b>1973</b>	12,155	12,028	na	na	9,947	83%
1974	13,640	13,553	na	na	11,132	82%
1975	17,290	16,528	na	na	12,680	77%
<b>1976</b>	17,530	16,658	na	na	12,071	70%
1977	14,232	12,883	na	na	8,474	64%
<b>1978</b>	11,827	11,831	na	na	7,237	61
<b>1979</b>	10,561	10,557	na	na	6,419	61%
<b>1980</b>	10,020	10,033	na	na	6,780	68%
<b>1981*</b>	12,470	12,508	na	na	9,711	78%
<b>1982**</b>	22,455	22,414	na	na	14,997	74%
<b>1983</b>	27,000	26,162	na	na	19,974	76%
<b>1984</b>	31,150	30,968	na	na	27,924	72%
<b>1985</b>	40,550	38,967	leftovers	439	26,837	68%
<b>1986</b>	43,725	40,819	leftovers	967	30,386	63%
<b>1987</b>	31,800	32,340	leftovers	293	22,916	70%
<b>1988</b>	29,360	29,201	leftovers	264	22,685	76%
<b>1989</b>	34,630	34,004	leftovers	604	29,917	76%
<b>1990</b>	35,250	34,468	leftovers	676	28,088	70%
<b>1991</b>	32,390	32,409	leftovers	558	25,920	68%
<b>1992</b>	31,430	31,364	leftovers	145	25,542	72%
<b>1993</b>	34,680	34,867	leftovers	362	26,525	66%
<b>1994</b>	34,730	33,832	leftovers	235	27,605	65%
<b>1995</b>	34,180	33,100	leftovers	255	26,429	68%
<b>1996</b>	33,405	33,440	leftovers	45	23,807	64%
<b>1997</b>	35,140	34,411	leftovers	183	25,699	65%
<b>1998</b>	31,965	31,950	leftovers	66	23,561	65%
<b>1999</b>	33,835	33,353	leftovers	213	24,107	63%
<b>2000</b>	36,450	35,902	leftovers	238	21,493	63%
<b>2001</b>	43,945	39,260	leftovers	452	29,814	56%
<b>2002</b>	44,560	40,474	leftovers	503	32,445	59%
<b>2003</b>	44,585	42,872	leftovers	837	36,341	57%

\* includes 1,250 winter deer reduction permits sold in January '82 (harvest of 1,000 deer).

\*\* includes 2,085 winter deer reduction permits sold in January '83 (harvest of 1,595 deer).

NOTE: Success is based on total tags issued, not licenses sold, and deer harvested. Refer to Huxoll, Corey. South Dakota Department of Game. Fish and Parks Report, Big Game Harvest Projections. 2003 Game Report No. 2004-01 and previous to determine license type and tags issued for this season.

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**Table 10. East River Special Buck deer season license sales and harvest, 1998-present.**

YEAR	Lic Available	License Sold	Total Harvest	Hunter Success
1998	400	399	209	52%
1999	400	400	216	57%
2000	400	400	242	61%
2001	400	401	221	55%
2002	400	400	210	53%
2003	399	399	226	57%

**Table 11. East River Landowner deer season license sales and harvest, 1991-present.**

Year	Licenses Sold	Tags Sold	Total Harvest	Ave. Days Hunted	Mean Satisfaction	Hunter Success
1991	450	450	266	n/a	n/a	n/a
1992	728	728	237	n/a	n/a	n/a
1993	615	615	No data collected			
1994	862	862	459	n/a	n/a	53%
1995	773	773	402	3-70	n/a	64%
1996	906	906	420	3.90 n/a		59%
1997	910	910	437	3.51	3.40	62%
1998	1,306	1,453	789	3.50	3.28	60%
1999	1,620	1,732	954	3.42	3.31	55%
2000	1,827	1,966	1,100	3.35	3.04	60%
2001	1,889	2,084	980	4.04	3-13	47%
2002	1,840	2,080	1,183	4.09	2.99	57%
2003	2,575	3,089	1,559	4.42	2.95	50%

**Table 12. Sand Lake National Wildlife Refuge deer season license sales and harvest, 1976-present.**

YEAR	Res License Available	Res License Sold	NR License Available	NR License Sold	Total Harvest	Hunter Success
1976	600	600	48	36	na	Na
1977	400	400	32	25	na	Na
1978	400	400	32	24	268	63%
1979	400	400	32	31	287	67%
1980	500	500	40	38	315	59%
1981	550	551	44	44	436	73%
1982	700	684	50	50	426	58%
1983	500	500	40	39	258	48%
1984	500	500	40	40	295	59%
1985	875	793	70	57	459	54%
1986	800	766	64	60	435	53%
1987	500	503	40	40	591	69%
1988	500	500	40	40	634	68%
1989	625	625	50	50	786	65%
1990	625	599	50	52	531	56%
1991	625	627	50	38	524	57%
1992	625	630	50	50	585	43%
1993	625	625	55	49	518	38%
1994	625	625	55	48	398	29%
1995	550	545	40	45	192	21%
1996	550	560	45	35	199	33%
1997	550	488	45	36	175	33%
1998	550	556	45	39	215	36%
1999	550	524	45	45	175	31%
2000	550	558	45	36	216	36%
2001	550	543	45	50	204	34%
2002	550	540	45	54	241	41%
2003	550	540	45	54	219	37%

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Table 13. Lacreek National Wildlife Refuge deer season license sales and harvest, 1982-present.

<b>Year</b>	<b>Res License Available</b>	<b>Res License Sold</b>	<b>NR License Available</b>	<b>NR License Sold</b>	<b>Total Harvest</b>	<b>Hunter Success</b>
<b>1982</b>	100	100	na	na	24	24%
<b>1983</b>	90	68	na	10	24	35%
<b>1984</b>	100	100	10	10	44	40%
<b>1985</b>	90	71	8	2	42	53%
1986	70	69	14	4	23	29%
1987	80	59	8	4	20	32%
<b>1988</b>	80	68	8	7	27	36%
1989	80	71	8	6	28	36%
<b>1990</b>	80	81	8	6	44	41%
<b>1991</b>	80	61	12	7	29	32%
<b>1992</b>	80	64	8	4	30	43%
<b>1993</b>	80	68	8	8	25	33%
<b>1994</b>	80	68	9	7	35	48%
<b>1995</b>	80	65	16	6	26	37%
<b>1996</b>	80	76	8	7	26	31
<b>1997</b>	80	77	8	7	21	25%
<b>1998</b>	40	40	6	4	16	36%
<b>1999</b>	40	39	4	4	9	21%
<b>2000</b>	40	41	4	3	11	25%
<b>2001</b>	40	40	4	4	12	27%
<b>2002</b>	40	40	4	4	13	30%
<b>2003</b>	40	40	4	4	15	34%

Table 14. Waubay National Wildlife Refuge deer season license sales and harvest, 1987-present.

<b>Year</b>	<b>Res License Available</b>	<b>Res License Sold</b>	<b>NR License Available</b>	<b>NR License Sold</b>	<b>Total Harvest</b>	<b>Hunter Success</b>
<b>1987</b>	25	25	0	0	7	30
<b>1988</b>	25	25	2	2	9	33%
<b>1989</b>	30	30	2	2	11	34%
<b>1990</b>	30	30	2	2	14	44%
<b>1991</b>	65	65	6	6	60	61
<b>1992</b>	65	65	6	6	74	76%
<b>1993</b>	85	86	7	6	70	54%
<b>1994</b>	105	107	9	7	91	60%
<b>1995</b>	105	109	9	12	60	39%
<b>1996</b>	105	109	9	12	57	37%
<b>1997</b>	90	54	9	0	35	65%
<b>1998</b>	90	95	7	1	27	28%
<b>1999</b>	65	67	4	2	22	32%
<b>2000</b>	65	66	6	5	27	38%
<b>2001</b>	60	65	6	6	26	37%
<b>2002</b>	65	67	6	4	23	32%
<b>2003</b>	65	67	6	4	44	62%

**Table 15. Black Hills Buck Deer season license sales and deer harvest for unlimited licenses, 1959-1995.**

<i>Year</i>	<i>Res Lic Available</i>	<i>NR Lic Available</i>	<i>Total Harvest</i>	<i>Hunter Success</i>
1959	12,435	439	8,586	67
1960	15,600	403	8,881	57
1961	15,248	596	7,706	49%
1962	16,100	621	8,769	54%
1963	15,777	613	8,276	51%
1964	13,677	402	5,305	38%**
1965	15,102	536	8,089	52%
1966	14,559	519	7,908	52%
1967	17,378	900	10,482	57%
1968	22,230*	1,710	14,416*	60%
1969	24,180*	3,866	15,205*	54%
1970	17,624	2,876	6,962	34%**
1971	16,925	4,458	6,818	32%**
1972	17,502	2,905	8,537	42%
1973	20,485	3,984	11,076*	45%
1974	21,348	4,317	8,443'	33%
1975	17,487	3,096	5,921	29%
1976	14,924	3,664	4,575	25%**
1977	13,602	2,991	5,241	32%**
1978	15,630*	2,674	4,437*	25%**
1979	14,561 *	2,007	4,358*	27%**
1980	15,529*	1,726	5,488*	33%**
1981	15,821*	1,641	5,903*	32%**
1982	14,725*	1,395	6,369*	36%**
1983	16,440*	1,524	8,335*	35%**
1984***	14,140	1,736	5,114	32%
1985	12,729	1,675	4,308	30%
1986	13,419	1,732	4,000	26%
1987	14,777	1,830	3,821	23%
1988	13,933	1,549	4,993	32%
1989	12,715	1,572	4,813	34%
1990	12,944	1,577	4,278	29%
1991	12,894	1,425	5,170	36%
1992	13,123	1,630	5,309	36%
1993	12,802	1,934	4,165	28%
1994	12,934	2,466	4,688	30%
1995	11,311	2,221	3,954	29%

\* Includes Special Black Hills statistics

\*\* Buck-only seasons

\*\*\* Only Black Hills Buck data reported 1984-1995. In 1996 the Black Hills Deer season was restructured as a limited, lottery draw license. There was more than one license type available for this season and 1996 became the first year of data collection for this new format.

**Table 16. Black Hills Special Antlerless Deer season license sales and deer harvest, 1989-1995.**

<b>Year</b>	<b>Res Lic Available</b>	<b>Res License Sold</b>	<b>NR Lic Available</b>	<b>NR Licenses Sold</b>	<b>Total Harvest</b>	<b>Hunter Success</b>
<b>1989</b>	1,050	1,063	84	72	912	80%
<b>1990</b>	1,000	772	80	43	589	72%
<b>1991</b>	900	915	72	65	747	69%
<b>1992</b>	2,300	2,319	184	95	1,916	76%
<b>1993</b>	4,300	3,945	344	156	2,773	64%
<b>1994</b>	1,350	1,350	108	108	1,105	73%
<b>1995</b>	1,350	1,345	108	109	1,106	76%

**Table 17. Black Hills Deer season license sales and deer harvest, 1996-present.**

In 1996 this season underwent major management revisions which included the elimination of unlimited sale and availability of the Any Buck Deer licenses. At that time, all Black Hills licenses were made available only through a limited draw lottery system, similar to other South Dakota big game seasons.

<b>Year</b>	<b>Res Lic Available</b>	<b>Res License Sold</b>	<b>NR Lic Available</b>	<b>NR Licenses Sold</b>	<b>Total Harvest</b>	<b>Hunter Success</b>
<b>1996</b>	11,400	10,568	912	1,195	5,560	47%
<b>1997</b>	11,400	10,780	912	1,044	4,611	39%
<b>1998</b>	7,650	7,673	608	612	3,909	47%
<b>1999</b>	7,250	7,271	580	578	3,536	45%
<b>2000</b>	7,250	7,350	580	571	3,969	50%
<b>2001</b>	6,200	6,211	496	496	3,662	55%
<b>2002</b>	5,950	5,980	476	474	3,369	52%
<b>2003</b>	5,900	5,965	472	473	3,576	56%

**Table 18. Application pressure and final sales of West River deer season licenses by type.**

<b>Licenses</b>					
<b>Type</b>	<b>1st Choice</b>	<b>App's Available</b>	<b>Sold</b>	<b>% Sold</b>	
01	8,024	5,080	5,097	100.3%	
03	19	222	154	69.4%	
04	1,056	1,447	1,448	100.1%	
06	7	140	71	50.7%	
07	1,209	540	545	100.9%	
12	5,108	4,752	4,765	100.3%	
13	117	621	509	82.0%	
16	2,752	9,516	7,028	73.9%	
17	51	616	279	45.3%	
41	3,241	2,754	2,756	100.1%	
42	14	216	102	47.2%	
<b>Total</b>	<b>21,598</b>	<b>25,904</b>	<b>22,754</b>	<b>87.8%</b>	

Table 19. West River deer season statistics by license type, 2002-2003.

**West River Deer statistics by license type**

2002		Licenses			Harvest			
License Types	Type Description	Available	Sold	% Sold	Total	Does	Success	% Does
01,04,07	Single Any	9,660	9,304	96%	5,121	588	55.0%	11.5%
03,06,09	Single Antlerless	362	150	41%	64	64	42.7%	100.0%
12,16,41	Any +Antlerless	13,820	12,009	87%	11,500	5,127	47.9%	44.6%
13,17,42	Double Antlerless	1,534	524	34%	547	522	52.2%	95.4%
Total		25,376	21,987	87%	17,232	6,301	49.9%	36.6%

2003		Licenses			Harvest			
License Types	Type Description	Available	Sold	% Sold	Total	Does	Success	% Does
01,04,07	Single Any	7,067	7,090	100%	3,844	771	54.2%	20.1%
03,06,09	Single Antlerless	362	225	62%	126	116	56.0%	91.7%
12,16,41	Any+Antlerless	17,022	14,549	85%	14,019	7,167	48.2%	51.1
13,17,42		1,453	890	61%	1,027	971	57.7%	94.6%
Total		25,904	22,754	88%	19,015	9,025	49.8%	47.5%

Change from 2002 to 2003		Licenses			Harvest			
License Types	Type Description	Available	Sold	% Sold	Total	Does	Success	% Does
01,04,07	Single Any	-2,593	-2,214	4%	-1,277	183	-1%	9%
03,06,09	Single Antlerless	0	75	21%	62	52	13%	-8%
12,16,41	Any +Antlerless	3,202	2,540	-1%	2,519	2,040	0%	7%
13,17,42	Double Antlerless	-81	366	27%	480	449	5%	-1%
Total		528	767	1%	1,783	2,724	0%	11%

Table 20. Reported harvest dates for the 2003 West River deer season.

West River Firearm Deer Reported Harvest Dates					
Date	# Rptd	% Total	Date	# Rptd	% Total
<b>10/4</b>	15	0.2%	11/18	143	2.0%
<b>10/5</b>	5	0.1%	11/19	130	1.8%
10/6	2	0.0%	11/20	227	3.2%
10/7	1	0.0%	11/21	134	1.9%
10/8	4	0.1%	11/22	276	3.9%
10/9	1	0.0%	11/23	250	3.6%
10/10	4	0.1%	11/24	29	0.4%
<b>10/11</b>	0	0.0%	11/25	29	0.4%
<b>10/12</b>	0	0.0%	11/26	21	0.3%
<b>11/1</b>	125	1.8%	11/27	24	0.3%
11/2	130	1.8%	11/28	40	0.6%
11/3	46	0.7%	<b>11/29</b>	25	0.4%
11/4	34	0.5%	11/30	42	0.6%
11/5	9	0.1%	1/1	36	0.5%
11/6	15	0.2%	1/2	41	0.6%
11/7	12	0.2%	1/3	64	0.9%
<b>11/8</b>	1,588	22.6%	<b>1/4</b>	43	0.6%
11/9	1,029	14.6%	1/5	17	0.2%
11/10	427	6.1%	1/6	9	0.1%
11/11	240	3.4%	1/7	15	0.2%
11/12	185	2.6%	1/8	22	0.3%
11/13	142	2.0%	1/9	36	0.5%
11/14	183	2.6%	<b>1/10</b>	108	1.5%
<b>11/15</b>	493	7.0%	1/11	82	1.2%
11/16	335	4.8%	Total	7,034	
11/17	166	2.4%			
Weekend days are in bold.			October	32	0.5%
			November	6,529	92.8%
			January	473	6.7%



**Table 21. Reported doe harvest dates for the 2003 West River deer season.**

West River Firearm Doe Reported Harvest Dates					
Date	# Rptd	% Total	Date	# Rptd	% Total
<b>10/4</b>	13	0.4%	11/18	50	1.6%
<b>10/5</b>	3	0.1%	11/19	56	1.8%
10/6	2	0.1%	11/20	87	2.8%
10/7	1	0.0%	11/21	37	1.2%
10/8	2	0.1%	<b>11/22</b>	103	3.3%
10/9	0	0.0%	<b>11/23</b>	104	3.4%
10/10	4	0.1%	11/24	15	0.5%
<b>10/11</b>	0	0.0%	11/25	19	0.6%
<b>10/12</b>	0	0.0%	11/26	14	0.5%
<b>11/1</b>	54	1.7%	11/27	15	0.5%
<b>11/2</b>	49	1.6%	11/28	32	1.0%
11/3	16	0.5%	<b>11/29</b>	22	0.7%
11/4	16	0.5%	<b>11/30</b>	35	1.1%
11/5	5	0.2%	1/1	34	1.1%
11/6	9	0.3%	1/2	41	1.3%
11/7	3	0.1%	<b>1/3</b>	64	2.1%
<b>11/8</b>	564	18.2%	<b>1/4</b>	40	1.3%
<b>11/9</b>	442	14.3%	1/5	14	0.5%
11/10	182	5.9%	1/6	10	0.3%
11/11	98	3.2%	1/7	15	0.5%
11/12	76	2.5%	1/8	21	0.7%
11/13	68	2.2%	1/9	33	1.1%
11/14	70	2.3%	<b>1/10</b>	105	3.4%
<b>11/15</b>	182	5.9%	<b>1/11</b>	77	2.5%
<b>11/16</b>	131	4.2%	Total	3,099	
11/17	66	2.1%			
Weekend days are in bold.			Regular	2,316	74.7%
			Extension	606	19.6%
			Nov Ext	152	4.9%
			Jan Ext	454	14.6%

**Table 22. Reported harvest dates from antlerless licenses for the 2003 West River deer season.**

West River Antlerless License Reported Harvest Dates					
Date	# Rptd	% Total	Date	# Rptd	% Total
<b>10/4</b>	13	1.2%	11/18	9	0.9%
<b>10/5</b>	3	0.3%	11/19	6	0.6%
10/6	2	0.2%	11/20	27	2.6%
10/7	1	0.1%	11/21	3	0.3%
10/8	2	0.2%	<b>11/22</b>	15	1.4%
10/9	0	0.0%	<b>11/23</b>	21	2.0%
10/10	4	0.4%	11/24	15	1.4%
<b>10/11</b>	0	0.0%	11/25	19	1.8%
<b>10/12</b>	0	0.0%	11/26	14	1.3%
<b>11/1</b>	16	1.5%	11/27	15	1.4%
<b>11/2</b>	11	1.0%	11/28	32	3.0%
11/3	4	0.4%	<b>11/29</b>	22	2.1%
11/4	4	0.4%	<b>11/30</b>	35	3.3%
11/5	0	0.0%	1/1	34	3.2%
11/6	3	0.3%	1/2	41	3.9%
11/7	0	0.0%	<b>1/3</b>	64	6.0%
<b>11/8</b>	108	10.2%	<b>1/4</b>	40	3.8%
<b>11/9</b>	51	4.8%	1/5	14	1.3%
11/10	28	2.6%	1/6	10	0.9%
11/11	15	1.4%	1/7	15	1.4%
11/12	10	0.9%	1/8	21	2.0%
11/13	11	1.0%	1/9	33	3.1%
11/14	15	1.4%	<b>1/10</b>	105	9.9%
<b>11/15</b>	35	3.3%	<b>1/11</b>	77	7.3%
<b>11/16</b>	27	2.6%	Total	1,058	
11/17	8	0.8%			
Weekend days are in bold.			Regular	389	36.8%
			Extension	606	57.3%
			Nov Ext	152	14.4%
			Jan Ext	454	42.9%

**Table 23. Application pressure and final sales of East River deer season licenses by type.**

Type	Licenses			
	1st Choice App's Available	Sold	% Sold	
01	25,106	13,685	13,746	100.4%
03	867	6,500	6,502	100.0%
04	3,613	1,900	1,909	100.5%
06	88	950	950	100.0%
07	370	500	502	100.4%
09	12	150	149	99.3%
12	7,143	6,100	6,109	100.1
13	1,489	8,250	7,996	96.9%
16	2,363	3,175	3,151	99.2%
17	398	3,375	2,695	79.9%
Total	41,449	44,585	43,709	98.0%

**Table 24. East River deer season statistics by license type, 2002-2003.**

## East River Deer statistics by license type

2002		Licenses			Harvest			
License Types	Type Description	Available	Sold	% Sold	Total	Does	Success	% Does
01,04,07	Single Any	18,985	18,878	99%	11,423	2,069	60.5%	18.1
03,06,09	Single Antlerless	8,425	7,841	93%	4,610	4,135	58.8%	89.7%
12,16,41	Any +Antlerless	7,400	7,096	96%	8,411	4,040	59.3%	48.0%
13,17,42	Double Antlerless	10,150	7,162	71%	7,995	7,443	55.8%	93.1%
Total		44,960	40,977	91%	32,439	17,687	58.7%	54.5%

2003		Licenses			Harvest			
License Types	Type Description	Available	Sold	% Sold	Total	Does	Success	% Does
01,04,07	Single Any	16,128	16,157	100%	9,994	2,135	61.9%	21.4%
03,06,09	Single Antlerless	7,650	7,601	99%	4,368	4,041	57.5%	92.5%
12,16,41	Any + Antlerless	9,308	9,260	99%	10,566	5,122	57.0%	48.5%
13,17,42	Double Antlerless	12,336	10,691	87%	11,407	10,641	53.3%	93.3%
Total		45,422	43,709	96%	36,334	21,938	57.1%	60.4%

Change from 2002 to 2003		Licenses			Harvest			
License Types	Type Description	Available	Sold	% Sold	Total	Does	Success	% Does
01,04,07	Single Any	-2,857	-2,721	1 %	-1,429	66	1 %	3%
03,06,09	Single Antlerless	-775	-240	6%	-242	-94	-1%	3%
12,16,41	Any +Antlerless	1,908	2,164	4%	2,155	1,082	-2%	0%
13,17,42	Double Antlerless	2,186	3,529	16%	3,412	3,198	-2%	0%
Total		462	2,732	5%	3,895	4,251	-2%	6%

**Table 25. Reported harvest dates for the 2003 East River deer season.**

<b>East River Firearm Deer Reported Harvest Dates</b>					
<b>Date</b>	<b># Rptd</b>	<b>% Total</b>	<b>Date</b>	<b># Rptd</b>	<b>% Total</b>
<b>11/15</b>	2,218	17.1%	12/3	43	0.3%
<b>11/16</b>	1,175	9.1%	12/4	32	0.2%
11/17	276	2.1%	12/5	49	0.4%
11/18	163	1.3%	<b>12/6</b>	160	1.2%
11/19	145	1.1%	<b>12/7</b>	105	0.8%
11/20	237	1.8%	1/1	186	1.4%
11/21	190	1.5%	1/2	156	1.2%
<b>11/22</b>	1,896	14.6%	<b>1/3</b>	209	1.6%
<b>11/23</b>	911	7.0%	<b>1/4</b>	129	1.0%
11/24	366	2.8%	1/5	45	0.3%
11/25	360	2.8%	1/6	56	0.4%
11/26	356	2.7%	1/7	56	0.4%
11/27	517	4.0%	1/8	47	0.4%
11/28	582	4.5%	1/9	77	0.6%
<b>11/29</b>	831	6.4%	<b>1/10</b>	248	1.9%
<b>11/30</b>	760	5.9%	<b>1/11</b>	220	1.7%
12/1	110	0.8%	Total	12,963	
12/2	52	0.4%			
<b>Weekend days are in bold.</b>			<b>November</b>	<b>10,983</b>	<b>84.7%</b>
			<b>December</b>	<b>551</b>	<b>4.3%</b>
			<b>January</b>	<b>1,429</b>	<b>11.0%</b>

**Table 26. Reported harvest dates from antlerless licenses for the 2003 East River deer season.**

<b>East River Antlerless License Reported Harvest Dates</b>					
<b>Date</b>	<b># Rptd</b>	<b>% Total</b>	<b>Date</b>	<b># Rptd</b>	<b>% Total</b>
<b>11/15</b>	707	11.7%	12/3	45	0.7%
<b>11/16</b>	411	6.8%	12/4	30	0.5%
11/17	93	1.5%	12/5	47	0.8%
11/18	48	0.8%	<b>12/6</b>	156	2.6%
11/19	46	0.8%	<b>12/7</b>	98	1.6%
11/20	77	1.3%	1/1	189	3.1%
11/21	79	1.3%	1/2	157	2.6%
<b>11/22</b>	737	12.1%	<b>1/3</b>	217	3.6%
<b>11/23</b>	347	5.7%	<b>1/4</b>	138	2.3%
11/24	125	2.1%	1/5	42	0.7%
11/25	135	2.2%	1/6	55	0.9%
11/26	143	2.4%	1/7	55	0.9%
11/27	210	3.5%	1/8	46	0.8%
11/28	267	4.4%	1/9	75	1.2%
<b>11/29</b>	351	5.8%	<b>1/10</b>	254	4.2%
<b>11/30</b>	308	5.1%	<b>1/11</b>	223	3.7%
12/1	105	1.7%	Total	6,066	
12/2	50	0.8%			
<b>Weekend days are in bold.</b>			<b>Regular</b>	<b>4,084</b>	<b>67.3%</b>
			<b>Extension</b>	<b>1,982</b>	<b>32.7%</b>
			<b>Dec Ext</b>	<b>531</b>	<b>8.8%</b>
			<b>Jan Ext</b>	<b>1,451</b>	<b>23.9%</b>

**Table 27. Reported doe harvest dates for the 2003 East River deer season.**

<b>East River Doe Reported Harvest Dates</b>					
<b>Date</b>	<b># Rptd</b>	<b>% Total</b>	<b>Date</b>	<b># Rptd</b>	<b>% Total</b>
11/15	980	16.2%	12/3	41	0.7%
11/16	628	10.4%	12/4	30	0.5%
11/17	142	2.3%	12/5	40	0.7%
11/18	76	1.3%	<b>12/6</b>	138	2.3%
11/19	67	1.1%	<b>12/7</b>	94	1.5%
11/20	118	1.9%	1/1	174	2.9%
11/21	116	1.9%	1/2	144	2.4%
<b>11/22</b>	918	15.1%	<b>1/3</b>	198	3.3%
<b>11/23</b>	457	7.5%	<b>1/4</b>	122	2.0%
11/24	171	2.8%	1/5	45	0.7%
11/25	191	3.1%	1/6	55	0.9%
11/26	186	3.1%	1/7	52	0.9%
11/27	264	4.4%	1/8	48	0.8%
11/28	352	5.8%	1/9	73	1.2%
<b>11/29</b>	490	8.1%	<b>1/10</b>	240	4.0%
<b>11/30</b>	452	7.5%	<b>1/11</b>	210	3.5%
12/1	85	1.4%	Total	7,439	
12/2	42	0.7%			
<b>Weekend days are in bold.</b>			<b>Regular</b>	<b>5,608</b>	<b>75.4%</b>
			<b>Extension</b>	<b>1,831</b>	<b>24.6%</b>
			<b>Dec Ext</b>	<b>470</b>	<b>6.3%</b>
			<b>Jan Ext</b>	<b>1,361</b>	<b>18.3%</b>

**Table 28. Pre-hunt Black Hills fall classification counts, 2003.**

<b>MgtUnit</b>	<b>Species</b>	<b>Fawns</b>	<b>Does</b>	<b>Fawns/Doe</b>
1	WT MD	98	78	1.26
2	WT MD	236 39	350 61	0.67 0.64
3	WT MD	172 21	152 16	1.13 1.30
4	WT MD	107 15	148 36	0.72 0.41
<b>Totals</b>				
	Whitetail	613	728	0.84
	Mule Deer	75	113	0.67

**Table 29. Pre-hunt West River fall classification counts, 2003.**

MgtUnit	Species	Fawns	Does	Fawns/Doe
Region 1				
	WT	795	634	1.25
	MD	1 057	1039	1.01
Region 2				
	WT	101	108	0.94
	MD	82	78	1.06
<b>Totals</b>				
	Whitetail	896	742	1.21
	Mule Deer	1139	1117	1.02

**Table 30. Pre-hunt East River white-tailed deer fall classification counts, 2003.**

MgtUnit	Species	Fawns	Does	Fawns/Doe
Region 2				
	WT	246	140	1.75
	MD	8	14	0.58
Region 3				
	WT	393	288	1.36
	MD			
Region 4				
	WT	552	351	1.57
	MD			
<b>Totals</b>				
	Whitetail	1,191	780	1.53
	Mule Deer	8	14	0.58

**Table 31. Big Game applicants for lottery-drawn deer licenses, 2003.**

Residents	# Applied	Unique Applied	# Successful	Unique Successful
General Archery	11,630	10,804	11,628	9,978
Antlerless Archery	2,678	2,095	2,642	1,658
Youth Antlerless	3,197	2,740	3,170	2,412
Muzzleloader	3,385	2,898	3,307	2,500
West River Prairie	25,481	22,222	21,630	18,923
East River	54,639	47,337	45,846	40,764
Refuge	882	754	650	474
Black Hills	11,156	10,731	5,970	5,970
<b>Total Residents</b>	<b>113,048</b>	<b>99,581</b>	<b>94,843</b>	<b>82,679</b>
Nonresidents	# Applied	Unique Applied	# Successful	Unique Successful
General Archery	1,366	1,353	1,366	1,341
Antlerless Archery	73	66	73	62
Youth Antlerless	85	61	83	41
Muzzleloader	62	61	59	57
West River Prairie	4,005	3,419	2,705	2,476
East River	1,012	941	835	782
Refuge	82	78	56	52
Black Hills	1,335	1,333	471	471
<b>Total Nonresid.</b>	<b>8,020</b>	<b>7,312</b>	<b>5,648</b>	<b>5,282</b>
<b>Tot Res. &amp; Nonres.</b>	<b>121,068</b>	<b>106,893</b>	<b>100,491</b>	<b>87,961</b>